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Number 43.

September 1985

The Protection of Wheat: January 1980- December 1984

Citations From Agricola
Concerning Diseases and Other
Environmental Considerations



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The Protection of Wheat: January 1980- December 1984

**Citations From Agricola
Concerning Diseases and Other
Environmental Considerations**

**Compiled and Edited By
Charles N. Bebee
National Agricultural Library**

Bibliographies and Literature of Agriculture Number 43

**United States Department of Agriculture
National Agricultural Library
Beltsville, Maryland 20705**

and

**United States Environmental Protection Agency
Office of Pesticides Programs
Washington, D.C. 20460**

September 1985

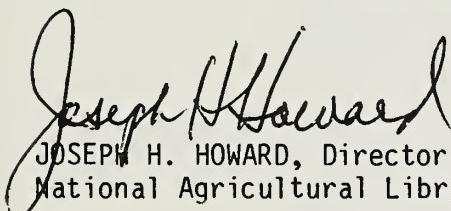
FOREWORD

This is the seventh volume in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the United States Department of Agriculture, National Agricultural Library (USDA-NAL), and the Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from United States publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director
National Agricultural Library



STEVEN SCHATZOW, Director
Office of Pesticide Programs

INTRODUCTION

The citations in this bibliography are selected from works by U.S. authors on all aspects of the protection of wheat. All citations are derived from AGRICOLA (AGRICultural OnLine Access), the family of data bases compiled by the National Agricultural Library and its cooperators.

This is the seventh bibliography included in a series of commodity-oriented environmental data bases jointly sponsored by the National Agricultural Library, United States Department of Agriculture (USDA-NAL), and the Office of Pesticides Programs, Environmental Protection Agency (EPA-OPP). Additional volumes issued recently or planned for the immediate future concern protection of corn, soybeans, pome fruits, stone fruits, grain sorghum, rice, and peanuts.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and in the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is also included in the publication.

The Office of Pesticide Programs, EPA, has furnished technical assistance to the compiler through members of a commodity-oriented environmental data team which included:

Charles D. Reese
H. Irving Brigham
Bernard Schneider, PhD.
Richard Petrie

Any comments or questions may be forwarded to the compiler:

Charles N. Bebee
USDA, National Agricultural Library
Room 111
Beltsville, MD 20705
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CONTENTS

	<u>Item No.</u>
Research	1-6
Meteorology and Climatology	7-12
History	13
U.S. Extension Services	14-16
Legislation	17-18
Economics	19-26
Land Economics	27
Economics of Agriculture Production	28-29
Farm Organization and Management	30-44
Distribution and Marketing	45-47
Grading, Standards, Labelling	48-65
Plant Production-General	66-84
Plant Production-Field Crops	85-176
Plant Breeding	177-287
Plant Ecology	288-293
Plant Structure	294-305
Plant Nutrition	306-390
Plant Physiology and Biochemistry	391-443
Plant Taxonomy and Geography	444-445
Protection of Plants	446-476
Pests of Plants-General and Miscellaneous	477-481
Pests of Plants-Insects	482-591
Pests of Plants-Nematodes	592-607
Plant Diseases-General	608-620
Plant Diseases-Fungal	621-1,105
Plant Diseases-Bacterial	1,106-1,114
Plant Diseases-Viral	1,115-1,157
Plant Diseases-Physiological	1,158-1,171
Miscellaneous Plant Disorders	1,172-1,231
Protection of Plant Products-General and Miscellaneous	1,232-1,254
Protection of Plant Products-Insects	1,255-1,305
Weeds	1,306-1,420
Pesticides-General	1,421-1,481
Soil Science	1,482-1,485
Soil Biology	1,486-1,493
Soil Chemistry and Physics	1,494-1,506
Soil Fertility-Fertilizers	1,507-1,641
Soil Resources and Management	1,642-1,647
Soil Cultivation	1,648-1,673
Soil Erosion and Reclamation	1,674-1,681
Forestry Related	1,682
Forest Products-Chemicals	1,683-1,684
Forest Injuries and Protection	1,685
Animal Science	1,686-1,687
Entomology Related	1,688-1,693
Animal Structure	1,694
Animal Nutrition	1,695-1,703

CONTENTS

	<u>Item No.</u>
Veterinary Pharmacy, Toxicology and Immune Therapeutic Agents	1,704-1,708
Pests of Animals-Insects	1,709
Animal Diseases-Bacterial	1,710
Animal Diseases-Physiological	1,711
Animal Disorders-Physical Trauma	1,712
Aquaculture Related	1,713
Structures and Structural Equipment	1,714
Farm Equipment	1,715-1,716
Natural Resources	1,717-1,720
Conservation and Use of Energy	1,721-1,722
Biomass Energy Sources	1,723-1,725
Water Resources and Management	1,726-1,727
Drainage and Irrigation	1,728-1,732
Food Science-Field Crop	1,733
Food Processing-Field Crop	1,734-1,738
Food Storage-Field Crop	1,739
Food Contamination and Toxicology	1,740-1,744
Food Contamination-Field Crop	1,745-1,763
Food Composition	1,764-1,765
Food Composition-Field Crop	1,766-1,780
Feed Processing and Storage	1,781-1,784
Feed Contamination, Toxicology	1,785-1,803
Feed Composition	1,804-1,805
Human Nutrition	1,806-1,807
Pollution	1,808-1,822
Mathematics and Statistics	1,823-1,833
Documentation	1,834
Life Sciences	1,835
Human Medicine, Health and Safety	1,836-1837
Chemistry	1,838
Technology	1,839
Author Index	p. 217-229

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RESEARCH

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Experiment station work, LVICompiled from the publications of the agricultural experiment stations : incompatibles in fertilizer mixtures, destruction of eelworms in soil, pruning, principles of dry farming, bean anthracnose or pod spot, methods of seeding oats, animal feeds for farm stock, rolling v. harrowing winter wheat, feeding the pig, jelly and jelly making /prepared in the Office of Experiment Stations. - . Washington, D.C. : U.S. Dept. of Agriculture, 1910. 32 p. : ill. - . Includes bibliographical references.

0003

Experiment station work, LVIIICompiled from the publications of the agricultural experiment stations : fertilizers for pineapples, the forced molting of fowls, wart disease of the potato, a portable panel fence, the typhoid or house fly, pasteurization in butter making, rice and its by-products as feed-stuffs, milling and baking tests with durum wheat /prepared in the Office of Experiment Stations. - . Washington, D.C. : U.S. Dept. of Agriculture, 1910. 32 p. : ill. - . Includes bibliographical references.

0004

Experiment station work, XXVIIICompiled from the publications of the agricultural experiment stations : hen manure, soft corn, nitrate of soda for field crops, hay substitutes, varieties, culture, and quality of wheat, oak leaves as forage, breeding corn, the covered milk pail, quality of irrigated crops, canning cheese, shading strawberries and vegetables, millet seed for hogs, injuries to shade trees, fertilizers for potatoes /prepared in the Office of Experiment Stations. - . Washington, D.C. : U.S. Dept. of Agriculture,

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Our challenges to protect wheat in hostile environments (Funding of research programs, United States). Vogel, O.A. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 223-227. (NAL Call No.: aSB191.W5N38 1982).

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Fowler, D.B. AGJOA. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 1060-1063. ill. 10 ref. (NAL Call No.: 4 AM34P).

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Winterkill weapons: buried minicomputers (Soil temperature measuring instruments in winter wheat fields, South Dakota).
Nyquist, K. SDFHA. Brookings : The Station. South Dakota farm and home research - South Dakota, Agricultural Experiment Station. 1982. v. 33 (1). p. 4-5. (NAL Call No.: 100 S082S).

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rangeland and in winter wheat, *Triticum
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U.S. EXTENSION SERVICES

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Kearney, T.E. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 20-21. ill. (NAL Call No.: 6 B46).

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Experiment station work, Igood vs. poor cows, corn vs. wheat, much vs. little protein, forage crops for pigs, Robertson silage mixture, alfalfa, proportion of grain to straw, phosphates as fertilizers, harmful effects of muriate of potash, studies in irrigation, potato scab, barnyard manure /prepared in the Office of Experiment Stations. -. Washington :_ U.S. Dept. of Agriculture,_ 1897. 31 p. : ill. -.

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Nematode advirosy programs--status and prospects (Wheat, soybeans, economic crops, United States).

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LEGISLATION

0017

Cereals '78, better nutrition for the world's millions.

Pomeranz, Y. St. Paul AACC 1978. Abstract: Selected papers (plus two additional chapters) from the Sixth International Cereal and Bread Congress (Winnipeg, Canada, September 16-22, 1978) are presented. The book serves as a text and reference for students and researchers. Titles are Feeding the World: A Challenge to All Mankind; The Aftermath of the Green Revolution; An Integrated Post Harvest System (Russian); Bread Wasting--A Universal Economic and Social Plague (French); The Role of Cereals in the Diet of the Developed World; Mechanizing the Cereal Processing Industry in the Developing World; Dichotomy of Surplus and Shortage; Structure of Cereal Grains as Related to End-Use Properties; Structure, Composition and Biochemistry of Cereal Grains; Contribution of Individual Chemical Constituents to the Functional (Breadmaking) Properties of Wheat; Trends in Bread Production; Developments in Baking Technology (German); Nutritional Quality of Cereal Grains; Storing and Preservation of Cereal Grains; Near Infrared Reflectance Spectroscopy--the Present and Future; Future Developments in Cereal Science; and Sociological Acceptance of Cereal Foods. 272 p. : ill. ; 29 cm. Includes bibliographies. (NAL Call No.: TX393.I52 1978 F&N B-2036).

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The farm pesticide industry.

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

ECONOMICS

0019

An analysis of American agriculture under various policy alternatives for 1980.
Chowdhury, A. Heady, E.O. Ames, Iowa, The Center. Extract: The specific objectives of this study are: (1) to indicate the amount and location of land to be withdrawn from wheat, feed grain and cotton production in 1980 under different policy alternatives, (2) to reflect an efficient allocation of production and land use under a minimum cost objective function for alternative adjustment or supply-control programs, (3) to estimate the national derived market prices under each program alternative, (4) to estimate production expenses and income from farming under each program alternative, and (5) to estimate deficiency payments, government land diversion payments and consumers food costs under each of the alternatives. CARD report - Iowa State University, Center for Agricultural and Rural Development. Oct 1979. Oct 1979. (86). 68 p. 26 ref. (NAL Call No.: 281.9 I093).

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Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0022

Fertilizer demand functions for five crops in the United States.
Gunjal, K.R. Roberts, R.K.; Heady, E.O. Lexington, Ky., Southern Agricultural Economics Assoc. Extract: Separate fertilizer demand functions are developed for five major crops grown in the United States. Per-acre expenditures on various fertilizer nutrients (N,P,K) and lime are aggregated in terms of real dollars for each crop. A hypothesis that fertilization rates depend on the type of crop leads to the formulation of a separate model for each crop. The results indicate that different crop sectors respond in varying degrees to the same economic factor. More

specifically, fertilizer demand is more elastic with respect to fertilizer price for grain (wheat and feed grains) farmers than for oil and cash crop (soybeans, tobacco, and cotton) farmers. The differences in these elasticities stem from the nature of the crop as well as its response to fertilizer application. Our findings suggest that changes in fertilizer prices and government policies will produce effects in varying degrees on different crop sectors. Southern journal of agricultural economics. Dec 1980. v. 12 (2). p. 111-116. 16 ref. (NAL Call No.: HD101.S6).

0023

Preliminary benefit analysis of captan for seed treatment of corn, small grains and soybeans.
Grube, A.H. Urbana, Ill. : The Department. Extract: This report is a preliminary benefit analysis of the fungicide captan used as a seed treatment on corn, soybeans, sorghum, wheat, barley, oats and rye. This analysis is intended as input to the risk/benefit decision by the Administrator of EPA as to the continued registration of captan under the Federal Insecticide, Fungicide, and Rodenticide Act. Illinois agricultural economics staff paper, series E agricultural economics - University of Illinois, Department of Agricultural Economics. Oct 1982. Oct 1982. (E-238). 201 p. Includes 325 references. (NAL Call No.: 916937(AGE)).

0024

Preliminary benefit analysis of PCNB for seed treatment on small grains and soybeans (pentachloronitrobenzene).
Grube, A.H. Urbana, Ill., The Department. Extract: This report is an economic impact analysis of the use of PCNB (pentachloronitrobenzene) as a seed treatment for small grains and soybeans. The information presented in this report corresponds to a specification of requirements for an economic impact analysis that appeared in the Federal Register, Vol. 41, No. 102 (Appendix IB) on May 25, 1976. The Notice requires that the preliminary analysis identify the major and minor uses of the pesticide, estimate the quantities utilized, identify the registered alternatives and their availability, determine the change in pesticide costs associated with the use of alternatives, and evaluate the regulatory impact upon crop production and retail prices. This analysis focuses on the uses of PCNB as a seed treatment on soybeans, wheat, barley, oats and sorghum in terms of active ingredients applied per year. Illinois agricultural economics staff paper, series E, agricultural economics - Dept. of Agricultural Economics, University of Illinois. Apr 1981. Apr 1981. (81 E-160). 109 p. Bibliography p. 92-105. (NAL Call No.: 916937(AGE)).

0025

South Carolina crop statistics, state and county data: 1975-1979 revised, 1980 preliminary.

South Carolina Crop and Livestock Reporting Service. Clemson, The Station. Extract: The agricultural statistics in this publication include revised crop statistics for acreage, yield, production and value of production at the state and county level for 1975-1979 and preliminary estimates for 1980. Regular Census revisions in state data have been completed and are reflected in the revised data. Also included are data on disposition of crops, number of farms, land in farms, commercial fertilizer, farm labor, vegetable statistics and quarterly grain stock estimates, both on and off farms. Supercedes AE 405 and 413. AE - South Carolina Crop and Livestock Reporting Service, Dept. of Agricultural Economics and Rural Sociology, S.C. Agricultural Experiment Station, Clemson University. June 1981. Predominantly tables. June 1981. (AE 417). 42 p. (NAL Call No.: 281.9 C59).

0026

South Carolina crop statistics, state and county data: 1980 revised, 1981 preliminary.

South Carolina Crop and Livestock Reporting Service. Clemson, The Station. Extract: The agricultural statistics in this publication include revised crop statistics for acreage, yield, production and value of production at the state and county level for 1980 and preliminary estimates for 1981. Also included are data on disposition of crops, number of farms, land in farms, commercial fertilizer, farm labor, vegetable statistics, and quarterly grain stock estimates, both on and off farms. AE - South Carolina Crop and Livestock Reporting Service, Dept. of Agricultural Economics and Rural Sociology, S.C. Agricultural Experiment Station, Clemson University. June 1982. Predominantly tables. June 1982. (421). 38 p. (NAL Call No.: 281.9 C59).

LAND ECONOMICS

0027

Emergency tillage to control wind erosion: influences on winter wheat yields.

Lyles, L.JSWCA. Tatarko, J. Ankeny, IA : Soil Conservation Society of America. Extract: About 2.4 million hectares (6 million acres) are tilled on an emergency basis each year to control wind erosion in the Great Plains. Much of the tillage is done on fall-seeded winter wheat (*Triticum aestivum* L.). Emergency chiseling of growing winter wheat in Finney County, Kansas, during early March (1977-1981) did not significantly influence grain yields on a silty clay site, regardless of whether a 76- or 152-centimeter (30- or 60-inch) chisel spacing was used, whether 50 or 100 percent of the area was tilled, or whether tillage was parallel or perpendicular to row direction. Similar results were obtained in 3 or 4 years on a sandy loam site. Narrow-point chisels have potential for reducing wind erosion if soil conditions are conducive to producing nonerodible aggregates. Wheat straw/grain ratios, stalk diameters, and volume weights are important factors in determining what wind erosion protection the vegetation is able to provide. Journal of soil and water conservation. Nov-Dec 1982. v. 37 (6). p. 344-347. Includes 11 references. (NAL Call No.: 56.8 J822).

ECONOMICS OF AGRIC. PRODUCTION

0028

An analysis of American agriculture under various policy alternatives for 1980.
Chowdhury, A. Heady, E.O. Ames, Iowa, The Center. Extract: The specific objectives of this study are: (1) to indicate the amount and location of land to be withdrawn from wheat, feed grain and cotton production in 1980 under different policy alternatives, (2) to reflect an efficient allocation of production and land use under a minimum cost objective function for alternative adjustment or supply-control programs, (3) to estimate the national derived market prices under each program alternative, (4) to estimate production expenses and income from farming under each program alternative, and (5) to estimate deficiency payments, government land diversion payments and consumers food costs under each of the alternatives. CARD report - Iowa State University, Center for Agricultural and Rural Development. Oct 1979. Oct 1979. (86). 68 p. 26 ref. (NAL Call No.: 281.9 I093).

0029

Fertilizer demand functions for specific nutrients applied to three major U.S. crops.
Roberts, R.K. Heady, E.O. College Station, Tex. : Western Agricultural Economics Association. Extract: Several past studies used time series data to estimate price elasticities of demand for fertilizer or nutrient use on all crops in the United States or by region. In this study, demand functions for nitrogen, phosphorous and potassium applied per acre of corn, wheat and soybeans in the United States were estimated, using a combination of autoregressive least squares and seemingly unrelated regression techniques. The results suggest that the demands for nitrogen, phosphorous and potassium applied to corn are price elastic, while similar responses for wheat and soybeans are price inelastic. Nitrogen and phosphorous applied per acre of corn were found to be positively related to government sponsored acreage diversion. The estimated elasticities could provide policymakers with insight for developing fertilizer and crop policies. Western journal of agricultural economics. Dec 1982. v. 7 (2). p. 265-277. Includes 25 references. (NAL Call No.: HD1750.W4).

FARM ORGANIZATION AND MANAGEMENT

0030

Cost estimates of alternative wheat production systems for Garfield County (Oklahoma).
Epplin, F.M. Tice, T.F.; Handke, S.J.; Peeper, T.F.; Krenzer, E.G. Jr. Stillwater, Okla. : The Station. Extract: This report presents estimates of costs and resource requirements for alternative wheat production systems. Bulletin B - Oklahoma Agricultural Experiment Station. Aug 1983. Aug 1983. (B-766). 45 p. Includes 14 references. (NAL Call No.: 100 DK4 (1)).

0031

Cost of alternative tillage systems in the winter wheat-dry pea area of the Palouse.
Mohasci, S.G. Hinman, H.R. Pullman, Wash., The Service. Extract: Costs and soil loss were determined for six tillage systems used in the dry pea-winter wheat area of the Palouse. No-till tillage saved the most topsoil, but had the highest crop-cycle costs, due to increased chemical costs. The system with the lowest costs used a cultivator for the initial tillage and saved nearly as much topsoil. Three other systems saved considerable amounts of topsoil when compared with moldboard plow tillage and had intermediate two-year costs. Extension bulletin - Washington State University, Cooperative Extension Service. Aug 1981. Aug 1981. (0943). 38 p. (NAL Call No.: 275.29 W27P).

0032

The costs of on-farm storage for wheat in Oklahoma.
Davis, C.D. OCFEA. Dehrtman, R.L. Stillwater : The Station. Oklahoma current farm economics - Oklahoma, Agricultural Experiment Station. Sept 1983. v. 56 (3). p. 14-23. Includes references. (NAL Call No.: 100 DK4 (5)).

0033

An economic engineering study of commercial grain storage in South Carolina (Corn, wheat, soybeans, costs and returns).
Shedd, D.T. SCAEA. Miller, S.E. Clemson : The Station. Bulletin - South Carolina Agricultural Experiment Station. July 1983. July 1983. (649). 18 p. Includes references. (NAL Call No.: 100 SD8 (1)).

0034

An economic evaluation of nitrogen fertilizers of Montana winter wheat.
Garnick, Bradley. Bozeman Montana State University, Montana Agricultural Experiment Station 1979. 84, (52) p. : ill. -. Bibliography: p. (85). (NAL Call No.: S544.3.M6M6 No.137).

0035

Economic interrelationships in Texas field crop production.
Shumway, C.R. College Station, Tex. : The Department. Extract: Technology, supply and demand relationships among six Texas field crops and three variable inputs are investigated using a dual approach. Evidence of nonjoint production is found for wheat but not for other crops. Three commodities, cotton, sorghum and corn, are found to be homothetically separable. No larger groups of outputs or any groups of inputs satisfy the sufficient conditions for consistent aggregation and two-stage choice. Departmental technical report - Texas Agricultural Experiment Station, Texas A & M University, Department of Agricultural Economics. Sept 1983. Sept 1983. (83-1). 36 p. Includes 38 references. (NAL Call No.: HD1775.T4T5).

0036

Economics of conservation tillage systems for winter wheat production in Oklahoma.
Epplin, F.M. JSWCA. Tice, T.F.; Handke, S.J.; Peeper, T.F.; Krenzer, E.G. Jr. Ankeny, IA : Soil Conservation Society of America. Extract: Alternative conservation tillage systems that rely on herbicides rather than mechanical tillage for weed control in annual winter wheat production in Oklahoma were investigated by an interdisciplinary team. The additional costs of the herbicides required for the experimental systems exceeded the value of the fuel and labor saved. However, most conservation tillage systems required less investment in machinery and some proved competitive with conventional systems on a total cost basis. Combination systems in which half the farm was conventionally tilled did not generate substantial savings in machinery investment. Journal of soil and water conservation. May-June 1983. v. 38 (3). p. 295-297. Includes 4 references. (NAL Call No.: 56.8 J822).

0037

Economics of no-till crop production.
Swenson, A.L. Johnson, R.G. Fargo, N.D. : The Station. Extract: When proper management has been utilized, spring seeded small grain yields under no-till are similar to conventional tillage yields. Costs of no-till on continuous cropping are slightly higher than production with conventional tillage practices when reductions are made in the amount of machinery owned. The high herbicide expenditures of complete chemical fallow presently make it economically uncompetitive with mechanical fallow. Substantial cost and labor distribution advantages of raising winter wheat in untilled seedbeds make it an attractive alternative to conventional spring seedings. Seeding directly into stubble provides a more favorable environment for overwinter survival, enabling winter wheat production in areas previously considered too risky. North Dakota farm research - North Dakota Agricultural

(FARM ORGANIZATION AND MANAGEMENT)

Experiment Station. Jan/Feb 1982. v. 39 (4). p. 14-17. Includes 8 references. (NAL Call No.: 100 N813B).

No.: 280.8 J822).

0038

Economics of summer fallow - wheat systems in North Dakota.

Ali, M.B. Johnson, R.G. Fargo : The Station. Extract: The specific study objectives are: 1. Develop a yield estimation model for wheat on fallow and nonfallow for four farming areas of North Dakota. 2. Develop wheat production budgets on fallow and nonfallow for each farming area. 3. Analyze the effects of wheat and nitrogen fertilizer prices on the economics of wheat on fallow and nonfallow for each farming area. 4. Analyze yield and income variability for wheat on fallow and nonfallow for each farming area. Bulletin - North Dakota Agricultural Experiment Station. Oct 1981. Oct 1981. (511). 36 p. Includes 30 references. (NAL Call No.: 100 N813).

0039

Estimates of operating cost differences between reduced and conventional tillage for continuous wheat production.

Epplin, F. Jobes, R.; Peepoer, T.; Stiegler, J. Stillwater, Okla., The Department. Extract: The purpose of this paper is to present comparisons of the operating costs of two "experimental" reduced tillage wheat production systems with the costs of a conventional clean tillage system. The conventional system is representative of current practices in north central Oklahoma. The reduced tillage systems have been proposed as technical alternatives to conventional practices. They reflect recent advances in grain drill modifications and weed control systems. A. E. paper - Oklahoma State University, Dept. of Agricultural Economics. Sept 1981. Sept 1981. (AE 8195). 10 p. 6 ref. (NAL Call No.: HD1775.0503).

0040

Farm level economics of soil conservation in the Palouse Area of the Northwest.

Burt, O.R. Lexington, Ky., American Agricultural Economics Association. Extract: Control theory is applied to the farm level economics of soil conservation in a model which uses depth of topsoil and percentage of organic matter therein as the two state variables. An approximately optimal decision rule was tested against the optimal rule and found to be excellent; errors in the decision rule were less than one percent within the region in state space of practical consideration. Results suggest that intensive wheat production under modern farming practices and heavy fertilization is the most economic cropping system in both the short and long run in the Palouse Area except under low wheat prices. American journal of agricultural economics. Feb 1981. v. 63 (1). p. 83-92. 11 ref. (NAL Call

0041

Fertilizer merchandising in North Dakota.

Anderson, D.E. Erlandson, G.W.; Moench, J.M. Fargo, N.D. : Dept. of Agricultural Economics, North Dakota Agricultural Experiment Station. Extract: Fertilizer utilization in North Dakota increased nearly sixfold during the 1957-1977 period. About 65 percent of the wheat acres received some fertilizer in 1976. There were 109 commercial wholesale fertilizer dealers in the state in 1972. The largest four wholesale firms accounted for 58 percent of the fertilizer sold during 1969-1972. There were 205 retail bulk fertilizer mixing firms in 1972. About 45 percent of these were located in the Red River Valley. The most common terms of trade that accompany fertilizer sales include custom blending, applicator rentals and service, soil testing credit policies, and a variety of discounts. Dealers state that bulk spreading and credit terms are their most important services offered. Agricultural economics report - Department of Agricultural Economics, North Dakota Agricultural Experiment Station. Aug 1978. Aug 1978. (132). 34 p. Includes 17 references. (NAL Call No.: 281.9 N814A).

0042

Near-optimal management strategies for controlling wild oats in spring wheat.

Taylor, C.R. Burt, D.R. Ames, Iowa : American Agricultural Economics Association. Extract: Near-optimal multiperiod decision rules for controlling wild oats in spring wheat in north central Montana are presented in this paper. Decision alternatives are fallow, use of a preemergent or postemergent herbicide, and crop without use of a herbicide. The near-optimal decision rules, which were obtained from a partially decomposed stochastic dynamic programming model, depend on density of wild oats seed in the plow layer, whether the land was previously cropped or fallow, soil moisture level, price of spring wheat, and post-planting density of wild oats. American journal of agricultural economics. Feb 1984. v. 66 (1). p. 50-60. Includes 12 references. (NAL Call No.: 280.8 J822).

0043

Optimum phosphorus fertilization.

Forster, D.L. Columbus : The Department. Extract: Fertilizer application rate decisions are ubiquitous for Corn Belt farmers. Typically, farmers have their soils analyzed by a private or public laboratory, receive a nutrient application recommendation, and base their actual nutrient application rates on these recommendations. However, recommendations lack explicit recognition of product prices or fertilizer prices. The purpose of this paper is to present a methodology for incorporating

(FARM ORGANIZATION AND MANAGEMENT)

prices in recommendations and to examine the impact of prices on the economic optimum application of phosphorus on corn, wheat, and soybeans. ESO - Ohio State University, Dept. of Agricultural Economics and Rural Sociology. July 1983. July 1983. (1049). 12 p. Includes 12 references. (NAL Call No.: HD1411.03).

0044

Summer fallow in North Dakota--an economic view.

Ali, M.B. Johnson, R.G. Fargo, N.D. : The Station. Extract: This report evaluates wheat summer fallow cropping systems within an economic framework from the short-term perspective of the farmer. The analysis is presented for wheat production for four farming areas of North Dakota. About 22 per cent of the total cropland in North Dakota is under summer fallow. Low per acre yields, low crop prices, and high nitrogen prices favor the summer fallow system. The trend of increasing wheat yields on fallow and nonfallow results in summer fallow becoming somewhat less economically desirable each year. Variability of income is less under the fallow cropping system. The price of grain and cost of nitrogen fertilizer, as well as trends in yields on fallowed and nonfallowed land, will influence the future role of summer fallow in North Dakota agriculture. North Dakota farm research - North Dakota, Agricultural Experiment Station. May/June 1981. v. 38 (6). p. 9-14. Includes 7 references. (NAL Call No.: 100 N813B).

DISTRIBUTION AND MARKETING

0045

Dwarf bunt of wheat and its importance in international wheat trade (*Tilletia controversa*, history, epidemiology, United States, China).

Trione, E.J. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 1083-1088. ill., map. 16 ref. (NAL Call No.: 1.9 P69P).

0046

An evaluation of the output control features of wheat price and income support programs in the United States and North Dakota, 1929 - 1965 / by Howard Kenneth Lahlum.

Lahlum, Howard Kenneth, 1936-1967. Thesis (M.S.)--University of Maryland, 1967. Extension Repository Collection ~Typescript (carbon copy) ~Vita. ix, 122 leaves : ill. ; 29 cm.

Bibliography: leaves 117-122. (NAL Call No.: HD9049.W5U44).

0047

Trade restrictions in international grain and oilseed markets: a comparative country analysis.

Jabara, C.L. Washington, D.C., The Service. Abstract: State trading practices and variable levies, which protect administered price levels set in importing countries, as well as tariffs, taxes, quotas, bilateral agreements, and other policies, tend to restrict the level of competition in international markets. In addition, many exporting countries implement similar types of policies that restrict or subsidize exports. Quantitative estimates of the degree of protection provided by trade and domestic policies of 18 major importing and exporting countries indicate that wheat and rice markets are the more heavily protected, followed by corn and soybeans. The importance of nontariff barriers in wheat, rice, and corn markets indicates difficulty in enhancing competition in these markets. Foreign agricultural economic report - U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service. Jan 1981. Jan 1981. (162). 41 p. 41 ref. (NAL Call No.: A281.9 AG8F).

GRADING, STANDARDS, LABELLING

0048

Canadian amber durum wheat, 1978 crop (Quality, physical and chemical characteristics).
Winnipeg, Supply and Services Canada. Crop bulletin Grain Research Laboratory. 1978. 1978. (139). 4 p. ill. (NAL Call No.: 59.9 C161C).

0049

Canadian red spring wheat, 1978 crop (Milling, baking, protein content, quality).
Winnipeg, Supply and Services Canada. Crop bulletin Grain Research Laboratory. Dec 1978. Dec 1978. (138). 17 p. ill., map. (NAL Call No.: 59.9 C161C).

0050

A collaborative study of sprouted wheat by colorimetric alpha-amylase, falling number and amylograph assays (test for damage in grain).
Mathewson, P.R. Miller, B.S. St. Paul, Minn., American Association of Cereal Chemists. Cereal foods world. Sept 1979. v. 24 (9). p. 453. (NAL Call No.: 59.8 C333).

0051

Effect of chlorine bleaching and baking temperature on methyl phoxim and malathion residues in (soft wheat flour) cakes.
Alnaji, L.K. Kadoum, A.M. St. Paul, Minn., American Association of Cereal Chemists. Cereal chemistry. July/Aug 1979. v. 56 (4). p. 245-248. ill. 9 ref. (NAL Call No.: 59.8 C33).

0052

Effect of graded doses of gamma-irradiation on aflatoxin production by Aspergillus parasiticus in wheat.
Priyadarshini, E. Tulpule, P.G. Oxford, Pergamon Press. Food and cosmetics toxicology. Oct 1979. v. 17 (5). p. 505-507. ill. 18 ref. (NAL Call No.: 391.8 F73).

0053

Effect of sewage sludge applications on phosphorus and metal concentrations in fractions of corn and wheat kernels.
Hinesly, T.D. Sudarski-Hack, V. St. Paul, Minn., American Association of Cereal Chemists. Cereal chemistry. July/Aug 1979. v. 56 (4). p. 283-287. ill. 14 ref. (NAL Call No.: 59.8 C33).

0054

Effect of variety on the chemical composition of wheat and barley straw.
Thomas, V.M. Cleveland, W.L. (s.l.), The Society. Proceedings of the annual meeting. American Society of Animal Science. Western Section. 1979. v. 30. p. 159-161. ill. 14 ref. (NAL Call No.: 389.9 AM31).

0055

Grain standards and discounts for corn, soybeans and wheat (Grading).
Nichols, T.E. Jr. Raleigh, N.C., The Service. AG. North Carolina State University. Agricultural Extension Service. Aug 1979. Aug 1979. (177). 7 p. ill. (NAL Call No.: S544.3.N6N62).

0056

In-transit shipboard fumigation of wheat (by applying aluminum phosphide tablets, insect control, residue analysis).
Redlinger, L.M. Zettler, J.L. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 15, 1979. v. 72 (4). p. 642-647. ill. 3 ref. (NAL Call No.: 421 J822).

0057

Interaction of wheat bran with nitrosamines and amines during nitrosation.
Wishnok, J.S. Richardson, D.P. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. July 1979. v. 36 (1). p. 1132-1134. ill. Bibliography p. 1133-1134. (NAL Call No.: 381 J8223).

0058

Microcomputer controlled titration for determination of protein nitrogen in feeds and wheat.
Wu, A.H.B. Rotunno, T. Arlington, Va., The Association. Journal. Association of Official Analytical Chemists. Sept 1979. v. 62 (5). p. 969-975. ill. 19 ref. (NAL Call No.: 381 AS7).

0059

Microflora of wheat and wheat flour from six areas of the United States (Bacterial contamination).
Rogers, R.F. Hesseltine, C.W. St. Paul, American Association of Cereal Chemists. Cereal chemistry. Nov/Dec 1978. v. 55 (6). p. 889-898. ill. 9 ref. (NAL Call No.: 59.8 C33).

(GRADING, STANDARDS, LABELLING)

0060

12 ref. (NAL Call No.: 389.9 AM31).

Report on reference materials and standard solutions (Wheat and rice flours, pesticide residues).

Alvarez, R. Washington. Journal Association of Official Analytical Chemists. Mar 1979. v. 62 (2). p. 340. 1 ref. (NAL Call No.: 381 AS7).

0061

Sprouting in hard red spring wheat (Effects on biochemical constituents and the effect on flour quality).

Ibrahim, Y. D'Appolonia, B.L. Chicago, Siebel. Bakers digest. Oct 1979. v. 53 (5). p. 17-19. ill. 10 ref. (NAL Call No.: 389.8 SI1).

0062

Thin layer chromatographic determination of citrinin (a toxic secondary metabolite first isolated from *Pencillium citrinin*, natural contaminant of barley, wheat, rye, and oats, and induces kidney lesions).

Stubblefield, R.D. Washington. Journal Association of Official Analytical Chemists. Jan 1979. v. 62 (1). p. 201-202. ill. 10 ref. (NAL Call No.: 381 AS7).

0063

Tissue residues of steers grazed on wheat pasture treated with Indar systemic fungicide.
Horn, G.W. Horn, F.P. Champaign, Ill., American Society of Animal Science. Journal of animal science. Aug 1979. v. 49 (2). p. 318-323. ill. 10 ref. (NAL Call No.: 49 J82).

0064

Wheat grading systems of the major wheat exporting countries: Argentina, Australia, Canada, France, and U.S.A.
Bushuk, W. Washington, D.C., The Administration. Agricultural reviews and manuals. ARM-W. United States. Dept. of Agriculture. Science and Education Administration. Western Region. Office of the Regional Administrator for Federal Research. Aug 1978. Aug 1978. (4). p. 4-16. ill. (NAL Call No.: aS21.A75U64).

0065

Wheat plant composition: varietal differences in physical composition, and in chemical composition and in vitro dry matter disappearance of the various parts (Nutritive value of straw).

Llata, A. de la. Swingle, R.S. (s.l.), The Society. Proceedings of the annual meeting. American Society of Animal Science. Western Section. 1979. v. 30. p. 183-187. ill.

PLANT PRODUCTION - GENERAL

0066

Annual progress report - 1980 : Shelby-Grundy Research Center, Beaconsfield, Iowa / Iowa State University of Science and Technology. 1981. This publication provides test information on grain sorghum, winter wheat, birdsfoot trefoil, and alfalfa management. Limestone rates and pasture interseeding systems are covered. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 14 p. : ill. (NAL Call No.: Not available at NAL). (NAL Call No.: ORC 80-02).

0067

Effect of fertilizer nitrogen rates on variation, heritabilities and associations of quantitative characters in wheat (*T. aestivum* L.) / by Mohammed-Ilyas L. Tunio. Tunio, Mohammed-Ilyas L., 1933. 1970. Thesis (Ph.D)--North Dakota State University, 1970. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. viii, 73 leaves ; 21 cm. Bibliography: leaves 70-73. (NAL Call No.: DISS 72-16,031).

0068

Effect of fluorine and phosphorus applied to a sodic soil on their availability and on yield and chemical composition of wheat. Singh, A. Chhabra, R. Baltimore, Williams & Wilkins Company. Soil science. Aug 1979. v. 128 (2). p. 90-97. ill. 18 ref. (NAL Call No.: 56.8 S03).

0069

Effect of temperature, nitrogen fertilization and moisture stress on growth, assimilate distribution and moisture use by Manitou spring wheat (Cultivars). Campbell, C.A. Davidson, H.R. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. July 1979. v. 59 (3). p. 603-626. ill. Bibliography p. 625-626. (NAL Call No.: 450 C16).

0070

Effect of temperature, nitrogen fertilization and moisture stress on yield, yield components, protein content and moisture use efficiency of Manitou spring wheat.

Campbell, C.A. Davidson, H.R. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Oct 1979. v. 59 (4). p. 963-974. ill. 24 ref. (NAL Call No.: 450 C16).

0071

Effects of Cycocel (CCC) and fungicide sprays on spring wheat grown at three nitrogen levels (Yields).

Johnston, H.W. MacLeod, J.A. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Oct 1979. v. 59 (4). p. 917-929. ill. 26 ref. (NAL Call No.: 450 C16).

0072

Effects of direct drilling and shallow cultivation on the nutrient content of shoots of winter wheat and spring barley on clay soils during an unusually dry season.

Cannell, R.Q. Graham, J.P. Oxford, Blackwell Scientific. Journal of the science of food and agriculture. Mar 1979. v. 30 (3). p. 267-274. ill. 18 ref. (NAL Call No.: 382 S012).

0073

Foliar fertilization of wheat, oats, and soybeans (Yields).

Welch, L.F. Brown, C.M. Urbana, The Station. Illinois research. Illinois. Agricultural Experiment Station. Summer 1979. v. 21 (3). p. 5-6. ill. (NAL Call No.: 100 IL64).

0074

Foliar nutrition of barley and wheat with various fertilizer products (Yields, protein analysis).

Bare, D. Ft. Collins. Progress report Colorado. Experiment Station. Feb 1978. Feb 1978. (5). 2 p. ill. (NAL Call No.: 100 C71C).

0075

Influence of weed growth and tillage interval during fallow on water storage, soil nitrates, and yield (in a winter wheat-sorghum cropping sequence, in the Southern Great Plains states of Kansas, Oklahoma, New Mexico, Colorado and Texas).

Lavake, D.E. Wiese, A.F. Madison, Wis. Soil Science Society of America journalSoil Science Society of America. May/June 1979. v. 43 (3). p. 565-569. ill. 19 ref. (NAL Call No.: 56.9 S03).

0076

Nitrogen fertilization of three winter wheat varieties in eastern Colorado (Yields).

Goos, R.J. Ludwick, A.E. Ft. Collins. Progress reportColorado. Experiment Station. Mar 1979. Mar 1979. (6). 2 p. ill. (NAL Call No.: 100 C71C).

0077

Reduction in atrazine toxicity to winter wheat by the growth retardant CCC / by Kenneth Kirkland.
 Kirkland, Kenneth. Ann Arbor, Mich. University Microfilms 1973. Thesis--Oregon State University, 1973. Facsimile produced by microfilm-xerography. 166 leaves. Bibliography: leaves 119-129. (NAL Call No.: DISS 73-7,837).

0078

Salt-tolerant crops solution to a complex problem (Barley, wheat, tomatoes, California, irrigation with seawater).
 Rush, D.W. Kelley, D.B.; Richards, R.; Norlyn, J.D.; Kingsbury, R.W.; Cunningham, G.A. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Oct 1981. v. 34 (1). p. 12-16. ill. (NAL Call No.: 6 W55).

0079

Soybean-wheat cropping systems : evaluation of planting methods, varieties, row spacings, and weed control / Charles R. Graves ... (et al.).
 Graves, Charles R. Knoxville University of Tennessee, Agricultural Experiment Station 1980. Cover title. 42 p. : ill. ; 23 cm. -. (NAL Call No.: 100 T25S (1) (no.) 597).

0080

Soybeans: variety, fertilizer, growth regulator, antitranspirant, and planting-after-wheat studies on the High Plains of eastern New Mexico (Yields).
 Fuehring, H.D. Finkner, R.E. Las Cruces. Research report New Mexico. Agricultural Experiment Station. June 1978. June 1978. (372). 12 p. ill. 8 ref. (NAL Call No.: 100 N465R).

0081

Varieties (Wheat, yields, disease and insect resistance).
 Wilkins, H. Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). p. 3-6. ill. (NAL Call No.: 275.29 K13EX).

0082

Wheat production handbook (Includes culture, diseases and pests, harvesting, storage, cost and return planning, fertilizing).
 Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). 29 p. ill. 1 ref. (NAL Call No.: 275.29 K13EX).

0083

Wheat systems in practice (Varieties, yields, disease control).
 Stevens, D. London. Big farm management. Mar 1979. Mar 1979. p. 35-36, 39. ill. (NAL Call No.: S560.B54).

0084

0 (zero)-till soybean culture (in cornstalks and in wheat stubble, varieties, herbicides).
 McKibben, G.E. Urbana-Champaign, Ill., Illinois Agricultural Experiment Station. DSAC.Dixon Springs Agricultural Center. Jan 1979. Jan 1979. (7). p. 61-70. ill. 1 ref. (NAL Call No.: S1.D5).

PLANT PRODUCTION - FIELD CROPS

0085

Ammonium uptake by wheat varieties differing in Al (aluminium) tolerance (*Triticum aestivum*, toxicity).

Fleming, A.L. AGJOA. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 726-730. ill. Includes references. (NAL Call No.: 4 AM34P).

0086

Annual progress report - 1980 : Shelby-Grundy Research Center, Beaconsfield, Iowa / Iowa State University of Science and Technology. 1981. This publication provides test information on grain sorghum, winter wheat, birdsfoot trefoil, and alfalfa management. Limestone rates and pasture interseeding systems are covered. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 14 p. : ill. (NAL Call No.: Not available at NAL.). (NAL Call No.: ORC 80-02).

0087

Application of liquid anaerobically digested sewage sludge to dryland wheat.

Barbarick, K.A. Utschig, J.M.; Westfall, R.H.; Follette, R.H.; McBride, T. Ft. Collins, Colo., : The Station. Progress report - Colorado Experiment Station. May 1984. (10). 2 p.

0088

Atrazine carryover and its soil factor relationship to no-tillage and minimum tillage fallow-winter wheat cropping in the Central Great Plains (Herbicides, stand reduction, clay soils).

Smika, D.E. Sharman, E.D. Fort Collins, Colo., The Station. Technical bulletin - Colorado State University Experiment Station. May 1982. May 1982. (144). 4 p. ill. (NAL Call No.: 100 C71S (3)).

0089

Broadcast fertilizer study--spring wheat (Calcareous soils, Minnesota).

Varvel, G.E. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 46-47. (NAL Call No.: S1.M52).

0090

A comparison of chemical and mechanical fallow as methods for dryland wheat production / by Orville L. Nicholls.

Nicholls, Orville L. 1958. Thesis (M.S.)--University of Wyoming, 1958. Extension Repository Collection ~Typescript (carbon copy). vi, 46 leaves : ill. ; 29 cm. Bibliography: leaves (45)-46. (NAL Call No.: SB191.W5N49).

0091

Comparison of three phosphorus soil test procedures to wheat and soybean yields.

Jokela, W.E. Fenster, W.E.; O'Leary, M.; Buzicky, G.; Overdahl, C.J. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 160-161. (NAL Call No.: S1.M52).

0092

Comparison of three phosphorus soil test procedures to wheat, corn and soybean yields (Minnesota).

Fenster, W.E. MXMRA. Grava, J.; Evans, S.D.; Varvel, G.E.; O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 165-170. (NAL Call No.: S1.M52).

0093

Contribution of farm yard manure on the build up of available zinc in an Aridisol (Micronutrients, soil testing, wheat yields).

Srivastava, O.P. Sethi, B.C. New York, Marcel Dekker. Communications in soil science and plant analysis. 1981. v. 12 (4). p. 355-361. 9 ref. (NAL Call No.: S590.C63).

0094

Controlling cheatgrass; a problem in winter wheat.

Fay, P. Rardon, P. Bozeman, The Station. Capsule information series - Montana Agricultural Experiment Station. June 1980. June 1980. (21). 2 p. ill. (NAL Call No.: S83.M6).

0095

Correlation of extractable soil phosphorus and plant phosphorus with crop yields for double-cropped wheat and soybeans (*Triticum aestivum*, *Glycine max*, foliar diagnosis).

Hargrove, W.L. Boswell, F.C.; Touchton, J.T. Athens, Ga. : The Stations. Research bulletin - University of Georgia, Experiment Stations. Mar

(PLANT PRODUCTION - FIELD CROPS)

1984. Mar 1984. (304). 14 p. ill. Includes references. (NAL Call No.: S51.E2).

University, West Lafayette, IN 47907. 22 p. : ill. (NAL Call No.: ID-96).

0096

Crew winter wheat (Varieties, cultivation, performance, fungus disease resistance and susceptibility, milling and baking). Morrison, K.J. Allan, R.E.; Peterson, C.J.; Line, R.F.; Rubenthaler, G.L. Pullman, Wash. : The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Nov 1983. Nov 1983. (1212). 6 p. ill. (NAL Call No.: 275.29 W27P).

0101

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Early lodging of soft white wheat (Yields).

Pumphrey, F.V. Corvallis, Or., The Station. Special report - Oregon Agricultural Experiment Station. July 1981. July 1981. (633). p. 1-4. (NAL Call No.: 100 OR3M).

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Effect of applied and residual P (phosphorus) on double-cropped wheat and soybean under conservation tillage management (*Triticum aestivum*, *Glycine max*).

Sharpe, R.R. AGUOAT. Touchton, J.T.; Boswell, F.C.; Hargrove, W.L. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 31-35. ill. Includes references. (NAL Call No.: 4 AM34P).

(PLANT PRODUCTION - FIELD CROPS)

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Effect of banded and broadcast placement of Cu (copper) fertilizers on correction of Cu deficiency (*Triticum aestivum*, organic soils in northern Minnesota).

Varvel, G.E. AGUDA. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1983. v. 75 (1). p. 99-101. 9 ref. (NAL Call No.: 4 AM34P).

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The effect of chemical and traditional weed control methods on the yield of wheat at tubewell-56 and the Phularwan Farm.

Ghaffar, A. Iqbal, M.M.; Sabir, B.A.; Tabassum, M.S.; Westfall, D.G. Fort Collins, Colo. : Water Management Research Project, Colorado State University. Improving irrigation water management on farms : annual technical report. June 1980. June 1980. p. 551-563. (NAL Call No.: TC801.162).

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Bishnoi, U.R. Igbokwe, P. Nashville, The Academy. Journal of the Tennessee Academy of Science. Tennessee Academy of Science. Apr 1980. v. 55 (2). p. 70-72. illl. 10 ref. (NAL Call No.: 500 T25A).

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Effect of etridiazol and nitrappyrin treated N (nitrogen) fertilizers on soil mineral N status and wheat yields (Nitrification inhibitors, Illinois).

Liu, S.L. Varsa, E.C.; Kapusta, G.; Mburu, D.N. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 265-270. illl. Includes references. (NAL Call No.: 4 AM34P).

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Frank, A.B. Bauer, A. Madison, Wis., American Society of Agronomy. Agronomy journal. May/June 1982. v. 74 (3). p. 504-509. illl. Includes 17 ref. (NAL Call No.: 4 AM34P).

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Effect of magnesium-rich waters on soil properties, yield, and chemical composition of wheat (Irrigation).

Girdhar, I.K. SOSCA. Yadav, J.S.P. Baltimore : Williams & Wilkins. Soil science. Dec 1982. v. 134 (6). p. 348-353. 14 ref. (NAL Call No.: 56.8 S03).

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The effect of nitrification inhibitors on wheat yields and soil nitrogen retention.

Varsa, E.C. Liu, S.L.; Kapusta, G. Midland, Mich., Agricultural Products Dept., Dow Chemical Co. Down to earth. Sept 1981. v. 37 (3). p. 1-5. illl. Includes 2 ref. (NAL Call No.: 381 D75).

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The effect of water injection and starter fertilizer on stand establishment and components of yield (Winter wheat).

Noori-Fard, F. Bolton, F.E. Corvallis, Or., The Station. Special report - Oregon Agricultural Experiment Station. June 1981. June 1981. (623). p. 60-62. (NAL Call No.: 100 OR3M).

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Effect of nitrogen, phosphorus, and planting date on plant growth and development, water uptake and water stress in dryland wheat production (Eastern Oregon).

Agamennoni, R.OASPA. Bolton, F.E. Corvallis : The Station. Special report - Agricultural

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Effect of wheat straw management and supplemental nitrogen on growth and yield of doublecrop soybeans.

Hairston, J.E. Sanford, J.O.; Hayes, J.C. Mississippi State, Miss. : The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. May 1984. v. 9 (11). 4 p. Includes references. (NAL Call No.: S79.E37).

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Effects of N (nitrogen) fertilization on yield, growth, and extraction of water by wheat following soybeans and grain sorghum (Double cropping, Mississippi).
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Effects of nitrogen and phosphorus application method and nitrogen source on winter wheat grain yield and leaf tissue phosphorus.
Leikam, D.F. SSSJD. Murphy, L.S.; Kissel, D.E.; Whitney, D.A.; Moser, H.C. Madison : The Society. Journal - Soil Science Society of America. May/June 1983. v. 47 (3). p. 530-535. Includes references. (NAL Call No.: 56.9 S03).

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Effects of nitrogen fertilization on yield of wheat-ryegrass mixture grown for forage.
Edwards, N.C. MS. Mississippi State, The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Sept 1980. v. 43 (9). p. 7-8. (NAL Call No.: 100 M69MI).

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Effects of nitrogen fertilization on yield of wheat-ryegrass mixtures grown for forage.
Edwards, N.C. MS. Mississippi State, The Station. Research report - Mississippi Agricultural and Forestry Experiment Station. Mississippi. Agricultural and Forestry Experiment Station. Jan 1980. v. 5 (9). 3 p. ill. (NAL Call No.: S79.E37).

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Roberts, P.A. Van Gundy, S.D.; McKinney, H.E. Ames, Iowa. Society of Nematologists. Journal of nematology. July 1981. v. 13 (3). p. 338-345. ill. 19 ref. (NAL Call No.: QL391.N4J62).

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Evaluation of foliar-applied fungicides on wheat (Yield response).
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Evapotranspiration and yield estimation of spring wheat from canopy temperature (*Triticum aestivum*, stress, northern Utah).
Diaz, R.A. AGJOA. Matthias, A.D.; Hanks, R.J. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 805-810. ill. Includes references. (NAL Call No.: 4 AM34P).

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WLSBA. Kahl, R.B. Samson, F.B. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1984. v. 12 (3). p. 256-262. Includes references.

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Fowler, D.B. Gusta, L.V. Madison, Wis., American Society of Agronomy. Agronomy journal. May/June 1982. v. 74 (3). p. 539-540. Includes 11 ref. (NAL Call No.: 4 AM34P).

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Grain production of winter wheat after spring freeze injury.
Paulsen, G.M. AGJOA. Heyne, E.G. Madison : American Society of Agronomy. Agronomy journal. July/Aug 1983. v. 75 (4). p. 706-707. maps. Includes references. (NAL Call No.: 4 AM34P).

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Grain yields, soil water storage, and weed growth in a winter wheat-corn-fallow rotation (Nebraska).
Hoefer, R.H. Wicks, G.A.; Burnside, O.C. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1981. v. 73 (6). p. 1066-1071. 15 ref. (NAL Call No.: 4 AM34P).

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Hannaway, D.B. Youngberg, H.W.; McGuire, W.S.; Adams, H.P.; Claypool, D. Corvallis : The Service. Extension circular - Oregon State University, Extension Service. July 1983. July 1983. (1153). 4 p. ill. (NAL Call No.: 275.29 OR32C).

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High phosphorus and potassium rates on continuous Spring wheat (Yield, nutrient uptake, Minnesota).

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Initiation and spread of footrot of wheat caused by *Cercosporaella herpotrichoides* Fron / by Randall Charles Rowe.

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High profit potential for ag (agricultural) aviators in high-yield wheat (Foliar fungicides, other chemicals).

Washington : National Agricultural Aviation Association. Agricultural aviation : the world of agricultural aviation. Aug 1983. v. 10 (8). p. 20-21. (NAL Call No.: S494.5.A3W3).

0136

Integrated crop management for dryland small grain production in Montana (Wheat, barley, limited plant-available water, insect, disease, weed and herbicide injuries, yields).

Nissen, S.J. Juhnke, M.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1984. v. 68 (9). p. 748-752. ill. Includes 12 references. (NAL Call No.: 1.9 P69P).

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Identification and evaluation of soil chemical and physical properties limiting root development in Louisiana soils (Soybeans, wheat, minimum tillage, yields).

Dabney, S.M. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 290-299. ill. (NAL Call No.: 100 L936).

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Morrison, K.J. Peterson, C.J. Pullman, Wash., The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Nov 1981. Nov 1981. (0916). 4 p. (NAL Call No.: 275.29 W27P).

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Impact of disease on wheat yields in Idaho's Kootenai Valley in 1981 (Fungal diseases, crop losses, statistics).

Wiese, M.V. Herrman, T.; Grube, M. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1984. v. 68 (5). p. 421-424. ill. Includes references. (NAL Call No.: 1.9 P69P).

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Long-term benefits from a single application of P (phosphorus, Wheat).

Halvorson, A.D. Black, A.L. Atlanta, Ga., Potash & Phosphate Institute. Better crops with plant food. Winter 1981/1982. v. 66. p. 33-35. (NAL Call No.: 6 B46).

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Incidence of *Cephalosporium* stripe as influenced by winter wheat management practices (*Cephalosporium gramineum*).

Latin, R.X. Harder, R.W.; Wiese, M.V. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 229-230. Includes 15 ref. (NAL Call No.: 1.9

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Manganese deficiency and toxicity in wheat: influence on growth and forage quality of herbage (*Triticum aestivum*).

Fales, S.L. AGJOA. Ohki, K. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 1070-1073. ill. 18 ref.. (NAL Call No.: 4 AM34P).

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Smith, S.B. Butler, J.P. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Winter Meeting of the American Society of Agricultural

(PLANT PRODUCTION - FIELD CROPS)

Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-2503). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

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A new look at row and broadcast phosphate recommendations for winter wheat.

Peterson, G.A. Sander, D.H.; Grabouski, P.H.; Hooker, M.L. Madison, Wis., American Society of Agronomy. Agronomy journal. Jan/Feb 1981. v. 73 (1). p. 13-17. 9 ref. (NAL Call No.: 4 AM34P).

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Nitrogen and phosphorus fertilization of wheat cultivars.

Matocha, J.E. College Station, Tex. : The Station. PR - Texas Agricultural Experiment Station. Oct 1984. (4253). p. 196-200.

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Nitrogen fertilization of dryland winter wheat in eastern Colorado.

Westfall, D.G. Follett, R.H.; Echols, J.S.; Quick, J.S.; Croissant, R.L. Ft. Collins, Colo., : The Station. Progress report - Colorado Experiment Station. June 1984. (14). 2 p.

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Thom, W.O. Bitzer, M.J.; Wells, K.L. Lexington, Ky., The Service. AGR - University of Kentucky, Cooperative Extension Service. July 1981. July 1981. (87). 3 p. (NAL Call No.: S65.K4).

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Nitrogen fertilization of winter wheat in Routt County, Colorado.

Sullivan, D.M. Follett, R.H. Ft. Collins, Colo., : The Station. Progress report - Colorado Experiment Station. June 1984. (13). 2 p. Includes references.

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Occurrence of Septoria nodorum blotch and Septoria tritici blotch in Michigan winter wheat (Disease survey of commercial fields in 27 counties, 1982-1983).

Hart, L.P. Fulbright, D.W.; Clayton, J.L.; Ravenscroft, A.V. St. Paul, Minn. : American Phytopathological Society. Plant disease. May

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Optimum spacing of preplant bands of N and P (nitrogen and phosphorus) fertilizer for winter wheat (*Triticum aestivum*, Kansas).

Maxwell, T.M. Kissel, D.E.; Waggoner, M.G.; Whitney, D.A.; Cabrera, M.L. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 243-247. ill. Includes references. (NAL Call No.: 4 AM34P).

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Performance of small grain varieties in Louisiana, 1981-1982 (Wheat, oats, yields, disease resistance, comparisons).

Viator, H.P. Boquet, D.J.; Griffin, J.L.; Hallmark, W.B.; Hutchinson, R.L. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 124-137. (NAL Call No.: 100 L936).

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Pesticide plots at Rosemount (Residue carryover in calcareous soils, effects on wheat yield and on pre- and postharvest weed biomass, Minnesota).

Adams, R.S. Jr. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 107. (NAL Call No.: S1.M52).

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Phosphorus fertilization of dryland winter wheat in eastern Colorado.

Follett, R.H. Westfall, D.G.; Echols, J.W.; Quick, J.S.; Labhsetwar, V.J.; Soltanpour, P.N. Ft. Collins, Colo., : The Station. Progress report - Colorado Experiment Station. June 1984. (15). 2 p.

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Previous crop influence on fertilizer nitrogen requirements for double-cropped wheat (*Glycine max*, soybeans, *Sorghum bicolor*, *Triticum aestivum*, Georgia).

Hargrove, W.L. AGUOA. Touchton, J.T.; Johnson, J.W. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 855-859. ill. Includes references. (NAL Call No.: 4 AM34P).

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Rotation nitrogen study, Waseca, 1982 (Fertilizer needs crop rotation, corn, soybeans, wheat, Minnesota). Randall, G.W. MXMRA. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 109-111. (NAL Call No.: S1.M52).

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Saline seep management: is continuous cropping an alternative? (Wheat production and soil water use). Schneider, R.P. ND. Johnson, S.E.; Sobolik, F. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Mar/Apr 1980. v. 37 (5). p. 29-31. 10 ref. (NAL Call No.: 100 N813B).

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Small grain production guidelines for South Carolina--1982-83 (with insect, disease, weed control). Gooden, D.T. SCCCA. Murdock, E.C.; Smith, F.H.; Griffin, R.P. Clemson : The Service. Circular - USDA Cooperative Extension Service, Clemson University. Aug 1982. Includes 2 p. insert: New wheat varieties for 1981 and 1982. Aug 1982. (463 rev.). 22 p. ill. (NAL Call No.: 100 S08 (2)).

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Small grain production in Michigan. Leep, R. H. Copeland, L. O. Document available from: Michigan State University, Bulletin Office, P.O.Box 231, East Lansing, Michigan 48824 1981. Discusses soil and climatic requirements; varieties; land preparation; fertilizer needs; planting management, weed, insect, and disease control; harvest; and storage for winter wheat, oats, and barley. 1 sheet : ill. (NAL Call No.: Document available from source.).(NAL Call No.: EB E-1522).

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Soil nitrate quantity and movement as related to irrigated winter wheat in northeast Oregon. Pumphrey, F.V. OASPA. Rasmussen, P.E. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. July 1983. July 1983. (684). p. 31-36. (NAL Call No.: 100 OR3M).

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Soil test lab comparison (in west central Minnesota, fertilizer recommendations, corn-wheat rotation). Evans, S.D. MXMRA. Schrader, C.A. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 98-103. (NAL Call No.: S1.M52).

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Soil test lab comparison (Suggested fertilizer applications for corn and wheat in Minnesota). Evans, S.D. Schrader, C.R.; Jokela, W.E. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 101-106. (NAL Call No.: S1.M52).

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Some examples of the use of production functions to quantify environmental influences on crop productivity (Soil production function, with Chile as the test site, wheat, fertilizers). Culot, J.P. Honolulu, The Station. Departmental paper - Hawaii, Agricultural Experiment Station. 1981. 1981. (49). p. 107-121. Includes 7 ref. (NAL Call No.: OK1.H32).

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Spring wheat stand and yield losses from applying urea-N (nitrogen) fertilizer with the seed. Black, A.L. ND-AR-NC. Halvorson, A.D.; Reitz, L.L.; Reule, C.A. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Jan/Feb 1980. v. 37 (4). p. 8-12. ill. 13 ref. (NAL Call No.: 100 N813B).

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Spring wheat varieties for Wisconsin (Performance, fungus disease resistance). Oplinger, E.S. Brinkman, M.A.; Forsberg, R.A. Madison, Wis. : The Programs. Publication - Cooperative Extension Programs. University of Wisconsin - Extension. Feb 1984. Feb 1984. (2402,rev.). 2 p. (NAL Call No.: S544.3.W6W53).

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Starter fertilizer study--Spring wheat (Minnesota). Varvel, G.E. MXMRA. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 45-46. (NAL Call No.: S1.M52).

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0163

Test levels and crop quality as affected by different fertilizer programs in a continuous wheat cropping system.

Varvel, G.E. MXMRA. Severson, R.K. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 55-56. (NAL Call No.: S1.M52).

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Timing spring topdressing for wheat in Arkansas.

Fouts, M.L. Collins, F.C.; Sabbe, W.E. Fayetteville, Ark., The Station. Arkansas farm research - Arkansas Agricultural Experiment Station. Jan/Feb 1981. v. 30 (1). p. 2. (NAL Call No.: 100 AR42F).

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Using "blowdown" water to irrigate crops (Power plant cooling water, salinization, wheat, sorghum, California).

Jury, W.A. CAGRA. Stolzy, L.H.; Fox, C.A.; Vaux, H.J. Jr.; Straughan, I.R. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Mar/Apr 1983. v. 37 (3/4). p. 4-5. ill. (NAL Call No.: 100 C12CAG).

0166

Waverly spring wheat (Semidwarf soft white variety, performance, fungus disease resistance).

Morrison, K.J. Konzak, C.F.; Rubenthaler, G.L. Pullman, Wash. : The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Mar 1984. Mar 1984. (1256). 5 p. (NAL Call No.: 275.29 W27P).

0167

Weed control in a winter wheat-corn-ecofarming rotation (Reduced tillage, row spacing, seeding rates, *Triticum aestivum*, *Zea mays*, Nebraska).
Vander Vost, P.B. AGUOA. Wicks, Gg.A.; Burnside, O.C. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 507-511. ill. Includes references. (NAL Call No.: 4 AM34P).

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Weed control in corn planted into untilled winter wheat stubble.
Burnside, O.C. Wicks, G.A. Madison, Wis., American Society of Agronomy. Agronomy journal. May/June 1982. v. 74 (3). p. 521-526. Includes 12 ref. (NAL Call No.: 4 AM34P).

0169

Weed control in irrigated wheat.

Parker, R. Pullman, Wash., The Service. Extension bulletin - Washington State University, Cooperative Extension Service. Jan 1981. Jan 1981. (0760). 6 p. ill. (NAL Call No.: 275.29 W27P).

0170

Weed control in wheat (Western Washington).

Peabody, D.V. WUEXA. Pullman : The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Feb 1983. Revision of EM4007. Feb 1983. (1079). 5 p. (NAL Call No.: 275.29 W27P).

0171

Wheat and barley responses to rates of seeding and fertilizer in southwestern Saskatchewan.

Read, D.W.L. Warder, F.G. Madison, Wis., American Society of Agronomy. Agronomy journal. Jan/Feb 1982. v. 74 (1). p. 33-36. Includes 10 ref. (NAL Call No.: 4 AM34P).

0172

Wheat following corn or soybeans at Milan from 1976 through 1978 (Yields, fertilizers).

Graves, C.R. TN. McCutchen, T. Knoxville, The Station. Tennessee farm and home science; progress report - Tennessee Agricultural Experiment Station. Apr/June 1979. Apr/June 1979. (110). p. 10-11. (NAL Call No.: 100 T25F).

0173

Wheat production & fertilization in Indiana.

Polizotto, K. R. Mengel, D. B. 1981. This publication is aimed at helping farmers realize maximum wheat yields. It presents the recommended varieties & what to consider in selecting the right ones also discussed are management steps needed to insure adequate fertilization, proper seed bed preparation & optimum stand establishment. Document available from: Mailing Room, Ag. Administration Bldg., Purdue Univ., West Lafayette, IN 47907. 4 p. (NAL Call No.: AY244).

0174

Windbreak effects on soil water and wheat yield (Beneficial for wind erosion control, Tamarisk, Tamarix, Siberian elm, Ulmus pumila, Russian-olive, Elaeagnus angustifolia, honeysuckle, Lonicera, Siberian peashrub, Caragana aborescens, Kansas).

Lyles, L. Tatarko, J.; Dickerson, J.D. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural

(PLANT PRODUCTION - FIELD CROPS)

Engineers. Jan/Feb 1984. v. 27 (1). p. 69-72.
Includes references. (NAL Call No.: 290.9
AM32T).

0175

With no-till, he drops fertilizer below the
seeds (Modified drill operator, wheat
production equipment, Oregon).

Waukesha, Wis. : No-Till Farmer, Inc. No-till
farmer. July 1984. v. 13 (7). p. 8. ill. (NAL
Call No.: S604.N6).

0176

**Yield response of wheat to starter fertilizer
in northwestern Minnesota, 1981.**

Jokels, W.E. O'Leary, M. St. Paul : The
Station. Miscellaneous publication - University
of Minnesota, Agricultural Experiment Station.
1982. 1982. (2). p. 195-196. (NAL Call No.:
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PLANT BREEDING

0177

Adult-plant leaf rust (*Puccinia recondita*) resistance in PI 250413, an introduction of common wheat (Genetic aspects).

Dyck, P.L. Samborski, D.J. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Apr 1979. v. 59 (2). p. 329-332. ill. 4 ref. (NAL Call No.: 450 C16).

0178

Allelic and linkage relations among genes for reaction to wheat stem rust / by Hossein Kaveh. Kaveh, Hossein, 1934. 1968. Thesis (Ph.D.)--North Dakota State University, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. vi, 107 leaves : ill. ; 21 cm. Bibliography: leaves 81-84. (NAL Call No.: DISS 69-12,875).

0179

Allelic and linkage relations among genes for stem rust resistance from *Triticum turgidum*, 'Mindum', 'Acme' selection, 'Palestine', and 'Khapli' (*Puccinia graminis*, host plant, disease).

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Cholick, Fred. (Brookings, S.D.? Dept. of Plant Science, S.D. State University, Agricultural Experiment Station? 1983?). Cover title ~"Final report. ~At head of title: Research Agreement: Specific Cooperative Agreement~"CRIS no. 3090-20241-002A." (3) leaves ; 28 cm. (NAL Call No.: SB189.5.C5).

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Calculation of selection coefficients against unnecessary genes for virulence from field data (*Puccinia graminis tritici*, stem rust in wheat, *Triticum aestivum*, *Erysiphe graminis hordei*, powdery mildew in barley, *Hordeum vulgare*, resistance genes).

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(PLANT BREEDING)

0236

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0246

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Scharen, A.L. Eyal, Z. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1980. v. 64 (5). p. 492-496. ill. 12 ref. (NAL Call No.: 1.9 P69P).

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0248

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0250

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0255

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0256

Partial resistance of near-isogenic wheat lines compatible with *Erysiphe graminis* f. sp. *tritici* (Powdery mildew, breeding for resistance, Pennsylvania).

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Polypeptide mapping by two-dimensional electrophoresis and pathogenic variation in field isolates and induced mutants of *Erysiphe graminis* f. sp. *tritici* (*Colletotrichum lindemuthianum*, *Triticum aestivum*, wheat, parasitic inheritance).

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A procedure to identify resistance to wheat soilborne mosaic in wheat seedlings (*Triticum aestivum*, *Polymyxa graminis*, fungal vectors, resistant cultivars, Kansas). Bockus, W.W. Niblett, C.L. St. Paul, American Phytopathological Society. Plant disease. Feb 1984. v. 68 (2). p. 123-124. Includes references. (NAL Call No.: 1.9 P69P).

0261

Quantification of infection levels in wheat genotypes varying in stem rust resistance (*Triticum aestivum*, *Puccinia graminis*). Eaton, D.L. McVey, D.V.; Busch, R.H. Madison : Crop Science Society of America. Crop science. Jan/Feb 1984. v. 24 (1). p. 122-126. ill. Includes references. (NAL Call No.: 64.8 C883).

0262

Registration of Anza wheat (New cultivars, resistance to *Puccinia striiformis* and barley yellow dwarf virus). Qualset, C.O. Vogt, H.E.; Borlaug, N.E. Madison, Wis. : Crop Science Society of America. Crop science. July/Aug 1984. v. 24 (4). p. 827-828. Includes references. (NAL Call No.: 64.8 C883).

0263

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0265

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0266

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0268

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0269

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0270

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Small grain production guidelines for South Carolina--1982-83 (with insect, disease, weed control).
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0277

Ultrastructural studies of greenbug (Hemiptera: Aphididae) feeding damage to susceptible and resistant wheat cultivars (Schizaphis graminum).

A1-Mousawi, A.H. AESAA. Richardson, P.E.; Burton, R.L. College Park : The Society. Annals of the Entomological Society of America. Nov 1983. v. 76 (6). p. 964-971. illl. Includes references. (NAL Call No.: 420 EN82).

0273

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0278

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Washington, D.C., The Office. Major news releases and speeches - United States Department of Agriculture, Office of Governmental and Public Affairs. Mar 26/Apr 2, 1982. Mar 26/Apr 2, 1982. p. 20-21. (NAL Call No.: aS21.A8U51).

0274

Sorting of infection-type data sets toward the gene-for-gene model: a reply (Wheat, *Triticum aestivum*, with different genes for low reaction to *Puccinia recondita*).
 Browder, L.E. Eversmeyer, M.G. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. May 1982. v. 72 (5). p. 458-460. Includes 7 ref. (NAL Call No.: 464.8 P56).

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USDA protects 15 new seed varieties (Cotton, soybeans, tobacco, wheat, Kentucky bluegrass, fescue, oats, snapbeans, and Evening Primrose).
 Washington, The Office. Major news releases and speeches - United States Department of Agriculture, Office of Governmental and Public Affairs. Sept 3/17, 1982. Sept 3/17, 1982. p. 36-37. (NAL Call No.: aS21.A8U51).

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0280

USDA protects 16 new seed varieties (Alfalfa, garden beans, soybeans, wheat).

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0276

Temperature influence on expression of resistance to Hessian fly (Diptera: Cecidomyiidae) in wheat derived from *Triticum tauschii* (*Mayetiola destructor*).
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Use of DPX 3778 (3-(*p*-chlorophenyl)-6-methoxy-s-triazine-2,4-(-1H, 3H) dione-triethanolamine) to produce hybrid wheat seed (Chemical pollen control).
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0282

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Devlin, R.M. Kisiel, M.J. Beltsville, Md. Proceedings of the ... annual meeting Northeastern Weed Science Society. 1979. v. 33. p. 324-329. ill. 5 ref. (NAL Call No.: 79.9 N814).

0283

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Salazar, G.M. Joppa, L.R. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1981. v. 21 (5). p. 681-685. 8 ref. (NAL Call No.: 64.8 C883).

0284

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Roelfs, A.P. Martens, J.W. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1984. v. 74 (9). p. 1022. Includes 6 references. (NAL Call No.: 464.8 P56).

0285

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0286

A wheat stem rust resistance gene common to 12 cultivars of the Fourth International Winter Wheat Performance Nursery (*Puccinia graminis*). McVey, D.V. AR-NC. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1980. v. 20 (2). p. 275-277. ill. 5 ref. (NAL Call No.: 64.8 C883).

0287

Wild goatgrass gives greenbug resistance to wheat (*Schizaphis graminum*).

Martin, W. Washington, D.C., The Service. Agricultural research - United States Agricultural Research Service. Oct 1981. v. 30 (4). p. 13. ill. (NAL Call No.: 1.98 AG84).

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Effect of temperature and fertilizer N (nitrogen) on apex development in spring wheat.
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0289

The history and distribution of downy brome (*Bromus tectorum*) in North America (Weed, on rangeland and in winter wheat, *Triticum aestivum*, Western United States, Canada, herbicides).

Morrow, L.A. Stahlman, P.W. Champaign, Ill. : Weed Science Society of America. Weed science. 1984. v. 32 (suppl.). p. 2-6. maps. Includes references. (NAL Call No.: 79.8 W41).

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The particle morphology and some other properties of chloris striate mosaic virus (*Chloris gayana*, *Nesoclutha pallida*, vectors, wheat).

Francki, R.I.B. Hatta, T. London. Annals of applied biology. Jan 1979. v. 91 (1). p. 51-59. ill., plates. 21 ref. (NAL Call No.: 442.8 AN72).

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Phytotoxicity of leachate from coastal bermudagrass roots on germination and root growth of grass and clover.
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Weed competition in agronomic crops (Alfalfa, cotton, wheat, barley).
Cudney, D.W. Sacramento : California Weed Conference Office. Proceedings - California Weed Conference. 1981. 1981. (33rd). p. 9-12. (NAL Call No.: 79.9 C122).

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0294

Cytology and morphological development of basidia, dikaryons, and infective structures of *Urocystis agropyri* from wheat (Flag smut, *Triticum aestivum*).
Nelson, B.D. Jr. Duran, R. St. Paul : American Phytopathological Society. *Phytopathology*. Mar 1984. v. 74 (3). p. 299-304. ill. Includes references. (NAL Call No.: 464.8 P56).

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0295

Developmental differences in embryos of high and low protein wheat seeds during germination (under varied fertilizer conditions).
Ching, T.M. Rynd, L. Bethesda, American Society of Plant Physiologists. *Plant physiology*. Dec 1978. v. 62 (6). p. 866-870. ill. 20 ref. (NAL Call No.: 450 P692).

0300

Haustorium formation by *Puccinia hordei* in leaves of hypersensitive, partially resistant, and nonhost plant genotypes (Barley leaf rust, *Hordeum vulgare*, *Triticum aestivum*, a nonhost species, early cessation of colony growth, structure).
Niks, R.E. PHYTA. St. Paul : American Phytopathological Society. *Phytopathology*. Jan 1983. v. 73 (1). p. 64-66. ill. 10 ref. (NAL Call No.: 464.8 P56).

0296

Ear structure and the resistance of cereals to aphids (*Sitobion avenae* on wheat, *Triticum*, and barley, *Hordeum*).
Watson, S.J. Dixon, A.F.G. Guildford, Eng. : Butterworths. *Crop protection*. Mar 1984. v. 3 (1). p. 67-76. ill. Includes references. (NAL Call No.: SB599.C8).

0301

Role of the hypodermis and secondary cell wall thickening in basal stem internodes in resistance to strawbreaker foot rot in winter wheat (*Pseudocercosporella herpotrichoides* on *Triticum aestivum*, anatomical characteristics associated with resistance).
Murray, T.D. PHYTA. Bruchl, G.W. St. Paul : American Phytopathological Society. *Phytopathology*. Feb 1983. v. 73 (2). p. 261-268. ill. 31 ref. (NAL Call No.: 464.8 P56).

0297

Effect of dicamba on RNA, and protein of wheat and wild buckwheat and on nucleohistone formation / by Willie Eugene Arnold.
Arnold, Willie Eugene, 1943. 1969. Thesis (Ph.D.)--North Dakota State University, 1969. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. vii, 67 leaves ; 21 cm. Bibliography: leaves 62-67. (NAL Call No.: DISS 70-25,499).

0302

Sheath structure of *Tilletia indica* teliospores (Fungal cause of Karnal bunt of wheat).
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Hess, W.M. Baton Rouge, Claitor's Publishing Division. *Proceedings - Annual meeting Electron Microscopy Society of America*. 1979. 1979. (37th). p. 168-171. ill. 5 ref. (NAL Call No.: QH201.E4).

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0299

Genetic male and chemically induced sterility in *Triticum aestivum*. A comparison of events leading to sterility via cytogenetic and SEM (scanning electron microscopic) analysis of microsporogenesis).
Rajendra, B.R. Bates, L.S. Washington, D.C., American Genetic Association. *The Journal of*

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Ultrastructure of the interaction between the take-all fungus (*Gaeumannomyces graminis*) and antagonistic bacteria (*Bacillus mycoides*, wheat diseases, natural control).
Faull, J.L. Campbell, R. Ottawa, National Research Council of Canada. *Canadian journal of botany*. Sept 1, 1979. v. 57 (17). p. 1800-1808. ill. 25 ref. (NAL Call No.: 470 C16C).

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Ultrastructure of the pycnial and aecial stages
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wheat).

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74-86. ill. Bibliography p. 85-86. (NAL Call
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0306

Absorption and transport of iron in plants as influenced by the major nutrient elements (Beans, rice, wheat, maize).

Pandey, D.P. Kannan, S. New York, Marcel Dekker. Journal of plant nutrition. 1979. v. 1 (1). p. 55-63. ill. 10 ref. (NAL Call No.: QK867.J67).

0307

Aluminum effects on the growth and mineral levels of triticale, wheat and rye (Cultivars, aluminum tolerance, nutrient uptake).

Mugwira, L.M. New York, Marcel Dekker. Journal of plant nutrition. 1979. v. 1 (2). p. 219-240. ill. 15 ref. (NAL Call No.: QK867.J67).

0308

Ammonium uptake by wheat varieties differing in Al (aluminium) tolerance (*Triticum aestivum*, toxicity).

Fleming, A.L. AGUDA. Madison : American Society of Agronomy. Agronomy journal. Sept/Oct 1983. v. 75 (5). p. 726-730. ill. Includes references. (NAL Call No.: 4 AM34P).

0309

Availability of phosphorus from 17 rock phosphates in moderately and weakly acidic soils as determined by ^{32}P (phosphorus isotope) dilution, A value, and total P uptake methods (Wheat, chemical extraction methods, tracer technique).

Kucey, R.M.N. Bole, J.B. Baltimore, Md. : Williams & Wilkins. Soil science. Aug 1984. v. 138 (2). p. 180-188. Includes references. (NAL Call No.: 56.8 SD3).

0310

Batch and annual phosphorous fertilizer application for wheat in western Canada (Prairie soils).

Jose, H.D. Nilsen, L. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 29-31. (NAL Call No.: 6 B46).

0311

Broadcast fertilizer study--spring wheat (Calcareous soils, Minnesota).

Varvel, G.E. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 46-47. (NAL Call No.: S1.M52).

0312

Broadcast fertilizer study--Spring wheat (Minnesota).

Varvel, G.E. MXMRA. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 47-48. (NAL Call No.: S1.M52).

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The comparative use of nitrate, ammonium and urea fertilizers by oats and wheat as determined by ^{15}N (nitrogen isotope)-techniques.

Lierop, W van. Tran, T.S. New York, Marcel Dekker. Communications in soil science and plant analysis. 1980. v. 11 (3). p. 231-250. 31 ref. (NAL Call No.: S590.C63).

0314

Comparison of three phosphorus soil test procedures to wheat and soybean yields.

Jokela, W.E. Fenster, W.E.; O'Leary, M.; Buzicky, G.; Overdahl, C.J. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 160-161. (NAL Call No.: S1.M52).

0315

Comparison of three phosphorus soil test procedures to wheat, corn and soybean yields (Minnesota).

Fenster, W.E. MXMRA. Grava, J.; Evans, S.D.; Varvel, G.E.; O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 165-170. (NAL Call No.: S1.M52).

0316

Computer program for calculating DRIS (Diagnosis and Recommendation Integrated System) indices (Nutrient insufficiencies, maize, soybeans, sorghum, potatoes, wheat, rubber, sugarcane, sunflower, alfalfa).

Letzsch, W.S. CSOSA. Sumner, M.E. New York : Marcel Dekker. Communications in soil science and plant analysis. 1983. v. 14 (9). p. 811-815. Includes references. (NAL Call No.: S590.C63).

0317

Contribution of surface and subsurface layers of soil on wheat nutrition under fertilized and unfertilized conditions (Pot experiment).

Chribba, I.M.CSOSA. Sekhon, G.S. New York : Marcel Dekker. Communications in soil science and plant analysis. 1983. v. 14 (10). p. 975-987. Includes references. (NAL Call No.: S590.C63).

0318

Copper and manganese fertilization of wheat on an organic soil--Roseau county, (Minnesota), 1981 (Nutrient deficiencies).

Jokela, W.E. O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 197-199. (NAL Call No.: S1.M52).

0319

Correlation of extractable soil phosphorus and plant phosphorus with crop yields for double-cropped wheat and soybeans (*Triticum aestivum*, *Glycine max*, foliar diagnosis).

Hargrove, W.L. Boswell, F.C.; Touchton, J.T. Athens, Ga. : The Stations. Research bulletin - University of Georgia, Experiment Stations. Mar 1984. Mar 1984. (304). 14 p. ill. Includes references. (NAL Call No.: S51.E2).

0320

Demonstration trials bring rapid change in fertilization and seeding methods (Wheat and barley in Yolo County, California, Extension programs).

Kearney, T.E. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 20-21. ill. (NAL Call No.: 6 B46).

0321

Dry matter production in tops and roots of winter wheat as affected by phosphorus availability during various growth stages (*Triticum aestivum*, includes deficiency effects).

Sutton, P.J.AGJOA. Peterson, G.A.; Sander, D.H. Madison : American Society of Agronomy. Agronomy journal. July/Aug 1983. v. 75 (4). p. 657-663. ill. Includes references. (NAL Call No.: 4 AM34P).

0322

Effect of banded and broadcast placement of Cu (copper) fertilizers on correction of Cu deficiency (*Triticum aestivum*, organic soils in northern Minnesota).

Varvel, G.E.AGJOA. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1983. v. 75 (1). p. 99-101. 9 ref. (NAL Call No.: 4 AM34P).

0323

Effect of barban and flamprop methyl with solution nitrogen on wheat, wild oats (*Avena fatua*) and green foxtail (*Setaria viridis*).

Moyer, J.R. Dryden, R.D. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Apr 1979. v. 59 (2). p. 351-356. ill. 12 ref. (NAL Call No.: 450 C16).

0324

Effect of etridiazol and nitrappyrin treated N (nitrogen) fertilizers on soil mineral N status and wheat yields (Nitrification inhibitors, Illinois).

Liu, S.L. Varsa, E.C.; Kapusta, G.; Mburu, D.N. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 265-270. ill. Includes references. (NAL Call No.: 4 AM34P).

0325

Effect of fertilizer nitrogen rates on variation, heritabilities and associations of quantitative characters in wheat (*T. aestivum* L.) / by Mohammed-Ilyas L. Tunio.

Tunio, Mohammed-Ilyas L., 1933. 1970. Thesis (Ph.D)--North Dakota State University, 1970. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. viii, 73 leaves ; 21 cm. Bibliography: leaves 70-73. (NAL Call No.: DISS 72-16,031).

0326

Effect of mineral nutrition on take-all of wheat (caused by *Gaeumannomyces graminis* var. *tritici*).

Reis, E.M. Cook, R.J.; McNeal, B.L. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1982. v. 72 (2). p. 224-229. Includes 20 ref. (NAL Call No.: 464.8 P56).

(PLANT NUTRITION)

0327

Effect of nitrogen, phosphorus, and planting date on plant growth and development, water uptake and water stress in dryland wheat production (Eastern Oregon).

Agamennoni, R.OASPA. Bolton, F.E. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1983. Report of Columbia Basin agricultural research. June 1983. (680). p. 43-44. (NAL Call No.: 100 OR3M).

0328

Effect of phosphorus sources in germination of wheat, nitrogen on nitrate accumulation in small grains, and determination of critical nutrient levels of wheat.

Baker, John Milton, 1940. Ann Arbor, Mich. University Microfilms 1971. Thesis--Oklahoma State University, 1970. vi, 50 leaves. Bibliography: leaves 49-50. (NAL Call No.: DISS 71-11,096).

0329

Effect of surface soil temperature on early growth, nutrient uptake, and nutrient translocation by spring wheat (*Triticum aestivum*).

Boatwright, Glennis Owen, 1928. Ann Arbor, Mich. University Microfilms 1971. Thesis--Montana State University, 1970. viii, 75 leaves. Bibliography: leaves (69)-75. (NAL Call No.: DISS 71-8,103).

0330

Effect of temperature, nitrogen fertilization and moisture stress on growth, assimilate distribution and moisture use by Manitou spring wheat (Cultivars).

Campbell, C.A. Davidson, H.R. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. July 1979. v. 59 (3). p. 603-626. ill. Bibliography p. 625-626. (NAL Call No.: 450 C16).

0331

Effect of temperature, nitrogen fertilization and moisture stress on yield, yield components, protein content and moisture use efficiency of Manitou spring wheat.

Campbell, C.A. Davidson, H.R. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Oct 1979. v. 59 (4). p. 963-974. ill. 24 ref. (NAL Call No.: 450 C16).

0332

Effects of certain herbicides (inhibiting or not inhibiting photosynthesis) and their combinations on nitrate and nitrite reduction (in excised leaves of wheat).

Klepper, L.A. Bethesda, American Society of Plant Physiologists. Plant physiology. Aug 1979. v. 64 (2). p. 273-275. ill. 16 ref. (NAL Call No.: 450 P692).

0333

Effects of fertilizers on slow rusting in wheat (*Puccinia graminis tritici*, *Puccinia recondita tritici*).

Wilcoxson, R.D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1980. v. 70 (9). p. 930-932. 8 ref. (NAL Call No.: 464.8 P56).

0334

Effects of high nitrogen rates in starter fertilizers on Spring wheat (Minnesota).

Varvel, G.E.MXMRA. Severson, R.K. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 54. (NAL Call No.: S1.M52).

0335

Effects of N (nitrogen) fertilization on yield, growth, and extraction of water by wheat following soybeans and grain sorghum (Double cropping, Mississippi).

Sanford, J.O. Hairston, J.E. Madison, Wis. : American Society of Agronomy. Agronomy journal: July/Aug 1984. v. 76 (4). p. 623-627. ill. Includes references. (NAL Call No.: 4 AM34P).

0336

Effects of wetting agent, stage of growth, and species on the selectivity of diclofop (wheat, soybeans, cucumber, sorghum).

Schreiber, M.M. Warren, G.F. Champaign, Ill.. Weed Science Society of America. Weed science. Nov 1979. v. 27 (6). p. 679-683. ill. 13 ref. (NAL Call No.: 79.8 W41).

0337

Efficient use of phosphorous on winter wheat (Relationship between row and broadcast rates, southwestern Nebraska).

Peterson, G.A. Sander, D.H.; Grabouski, P.H.; Hooker, M.L. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Spring 1982. v. 66. p. 3-5. (NAL Call No.: 6 B46).

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EPTC (S-ethyl dipropylthiocarbamate) induced modification of gibberellin biosynthesis (Wheat, herbicide injury).

Wilkinson, R.E. Ashley, D. Champaign, Ill., Weed Science Society of America. *Weed science*. May 1979. v. 27 (3). p. 270-274. ill. 23 ref. (NAL Call No.: 79.8 W41).

0339

Evaluating N (nitrogen) fertilizer sources and timing for winter wheat.

Christensen, N.W. Meints, V.W. Madison, Wis., American Society of Agronomy. *Agronomy journal*. Sept/Oct 1982. v. 74 (5). p. 840-844. ill. 23 ref. (NAL Call No.: 4 AM34P).

0340

Evaluation of the need for copper with several soil extractants (Deficiencies, critical levels, soybeans, Glycine max, corn, Zea mays, wheat, Triticum aestivum, soils from the Atlantic Coastal Plain, North Carolina).

Makarim, A.K. AGJOA. Cox, F.R. Madison : American Society of Agronomy. *Agronomy journal*. May/June 1983. v. 75 (3). p. 493-496. Includes references. (NAL Call No.: 4 AM34P).

0341

Fertilizer response of reduced tillage wheat (Yields, Oregon's Columbia Basin).

Gardner, H. Nibler, F. Atlanta, Ga. : Potash & Phosphate Institute. *Better crops with plant food*. Summer 1984. v. 68. p. 26-27. ill. (NAL Call No.: 6 B46).

0342

Fertilizers suppress wheat disease (Take-all root rot, Gaeumannomyces graminis tritici, soil-borne fungal pathogens).

Christensen, N.W. Taylor, R.G. Atlanta, Potash & Phosphate Institute. *Better crops with plant food*. Spring 1982. v. 66. p. 34-36. (NAL Call No.: 6 B46).

0343

A field study with nitrogen-15 of soil and fertilizer nitrate uptake and of water withdrawal by spring wheat.

Strebel, O. Grimme, H.; Renger, M.; Fleige, H. Baltimore, Williams & Wilkins. *Soil science*. Oct 1980. v. 130 (4). p. 205-210. ill. 13 ref. (NAL Call No.: 56.8 S03).

0344

Growth and Ca, Mg, K, and P (calcium, magnesium, potassium, phosphorus) uptake by triticale, wheat, and rye at four Al levels (Aluminium toxicity).

Mugwira, L.M. USDA. New York, Marcel Dekker. *Journal of plant nutrition*. 1980. v. 2 (5). p. 591-606. 21 ref. (NAL Call No.: QK867.J67).

0345

Growth and chemical composition of two cultivars of (wheat) Triticum aestivum as affected by soil salinity.

Ansari, R. Naqvi, S.M. New York, Dekker. *Communications in soil science and plant analysis*. 1978. v. 9 (5). p. 443-453. ill. 17 ref. (NAL Call No.: S590.C63).

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Growth and water relations of wheat plants with roots split between soil and nutrient solution.

Erickson, P.I. Kirkham, M.B. Madison. *Agronomy journal* American Society of Agronomy. Mar/Apr 1979. v. 71 (2). p. 361-364. ill. 16 ref. (NAL Call No.: 4 AM34P).

0347

High phosphorus and potassium rates on continuous spring wheat (Plant and soil analyses, Minnesota).

Varvel, G.E. Severson, R.K. St. Paul : The Station. *Miscellaneous publication - University of Minnesota, Agricultural Experiment Station*. 1982. 1982. (2). p. 48-50. (NAL Call No.: S1.M52).

0348

High phosphorus and potassium rates on continuous Spring wheat (Yield, nutrient uptake, Minnesota).

Varvel, G.E. XMRA. Severson, R.K. St. Paul : The Station. *Miscellaneous publication - University of Minnesota, Agricultural Experiment Station*. 1983. 1983. (2 rev.). p. 49-51. (NAL Call No.: S1.M52).

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Holding back nitrification in the dry land wheat area of eastern Washington (Management steps to minimize fertilizer losses).

Halvorson, A.R. WA. Pullman, Wash., The Service. EM - Cooperative Extension Service, Washington State University. Washington State University. Cooperative Extension Service. Nov 1979. Nov 1979. (4504). 5 p. 3 ref. (NAL Call No.: 275.29 W27MI).

(PLANT NUTRITION)

0350

Increase in linolenic acid is not a prerequisite for development of freezing tolerance in wheat.

De La Roche, A.I. Bethesda, American Society of Plant Physiologists. Plant physiology. Jan 1979. v. 63 (1). p. 5-8. ill. 17 ref. (NAL Call No.: 450 P692).

0351

The influence of Mount St. Helens ash on wheat growth and phosphorus, sulfur, calcium, and magnesium uptake (*Triticum aestivum*).

Mahler, R.L. J.EVOAA. McDole, R.E.; Fredrickson, M.K. Madison : American Society of Agronomy. Journal of environmental quality. Jan/Mar 1984. v. 13 (1). p. 91-96. maps. Includes references. (NAL Call No.: QH540.J6).

0352

Influence of N (nitrogen) fertilization on wheat milling and baking quality (Oasis soft red winter wheat, protein content, Georgia). Johnson, J.W. Hargrove, W.L.; Touchton, J.T.; Yamazaki, W.T. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1984. v. 24 (5). p. 904-906. Includes references. (NAL Call No.: 64.8 C883).

0353

Influence of napropamide on the uptake and translocation of mineral nutrients (Herbicide, radish, wheat, corn, soybean). Devlin, R.M. Zbiec, I.I.; Karczmarczyk, S.J. Champaign, Ill., Weed Science Society of America. Weed science. Sept 1982. v. 30 (5). p. 503-506. 7 ref. (NAL Call No.: 79.8 W41).

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Interpretation of nutrient ratios in plant tissue (Maize, wheat, foliar diagnosis).

Sumner, M.E. New York, Dekker. Communications in soil science and plant analysis. 1978. v. 9 (4). p. 335-345. ill. 20 ref. (NAL Call No.: S590.C63).

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Magnesium and zinc relationship in relation to dry matter yield and the concentration and uptake of nutrients in wheat.

Kumar, V. Bhatia, B.K.; Shukla, U.C. Baltimore, Williams & Wilkins. Soil science. Mar 1981. v. 131 (3). p. 151-155. 21 ref. (NAL Call No.: 56.8 S03).

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Nitrate fertilizer timing, irrigation, protein, and yellow berry in durum wheat (in the desert area of Imperial Valley, California).

Robinson, F.E. Cudney, D.W. Madison. Agronomy journal American Society of Agronomy. Mar/Apr 1979. v. 71 (2). p. 304-308. ill. 10 ref. (NAL Call No.: 4 AM34P).

0357

Nitrogen fertilization and nitrogen utilization by eight small grain varieties--Morris, Minnesota, 1981 (Spring wheat).

Malzer, G.L. Evans, S.; Busch, R.; Graff, T. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 89-92. (NAL Call No.: S1.M52).

0358

Nitrogen fertilization of wheat and barley (Pope County, Minnesota).

Wright, J. King, T.; Jokela, W. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 201. (NAL Call No.: S1.M52).

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Nitrogen uptake by spring wheat, soil distribution, and recovery of N (nitrogen) fertilizer from alternate crop-fallow and recrop field management systems.

Jones, A.J. Skogley, E.O.; Meints, V.W.; Martin, J.M. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1981. v. 73 (6). p. 967-970. 18 ref. (NAL Call No.: 4 AM34P).

0360

Nutrient relations of winter wheat. 1. Accumulation and distribution of Na, K, Ca, Mg, P, S and N (sodium, potassium, calcium, magnesium, phosphorus, sulfur, and nitrogen). Gregory, P.J. Crawford, D.V. Cambridge, Cambridge University Press. Journal of agricultural science. Oct 1979. v. 93 (pt.2). p. 485-494. ill. 28 ref. (NAL Call No.: 10 J822).

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Nutrient relations of winter wheat. 2. Movement of nutrients to the root and their uptake.

Gregory, P.J. Crawford, D.V. Cambridge, Cambridge University Press. Journal of agricultural science. Oct 1979. v. 93 (pt.2). p. 495-504. ill. Bibliography p. 503-504. (NAL Call No.: 10 J822).

(PLANT NUTRITION)

0362

Optimum spacing of preplant bands of N and P (nitrogen and phosphorus) fertilizer for winter wheat (*Triticum aestivum*, Kansas).

Maxwell, T.M. Kissel, D.E.; Waggoner, M.G.; Whitney, D.A.; Cabrera, M.L. Madison : American Society of Agronomy. *Agronomy journal*. Mar/Apr 1984. v. 76 (2). p. 243-247. ill. Includes references. (NAL Call No.: 4 AM34P).

0363

Oxathiin fungicides : Effects of induction of nitrate absorption in wheat, I. Chemotherapy of loose smut of oats and leaf rust of wheat, II. / by Juanito Calampiano Reyes.

Reyes, Juanito Calampiano, 1935. 1971. Thesis (Ph.D.)--Kansas State University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. iv, 51 leaves ; 21 cm. Bibliography: leaves 48-51. (NAL Call No.: DISS 71-26,618).

0364

Physiological control of exo- and endoproteolytic activities in germinating wheat and their relationship to storage protein hydrolysis.

Preston, K.R. Kruger, J.E. Bethesda, Md., American Society of Plant Physiologists. *Plant physiology*. Sept 1979. v. 64 (3). p. 450-454. ill. 30 ref. (NAL Call No.: 450 P692).

0365

Potassium on wheat--Pennington county, (Minnesota), 1981 (Yield, uptake, soil fertility).

Jokela, W. O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 200. (NAL Call No.: S1.M52).

0366

Preliminary studies on triticale, wheat, barley, and rye responses to lime and N (nitrogen, fertilizers).

Mugwira, L.M. USDA CSRS. New York, Marcel Dekker. *Communications in soil science and plant analysis*. 1980. v. 11 (6). p. 587-603. ill. 12 ref. (NAL Call No.: S590.C63).

0367

Previous crop influence on fertilizer nitrogen requirements for double-cropped wheat (*Glycine max*, soybeans, *Sorghum bicolor*, *Triticum aestivum*, Georgia).

Hargrove, W.L. AGJDA. Touchton, J.T.; Johnson, J.W. Madison : American Society of Agronomy.

Agronomy journal. Nov/Dec 1983. v. 75 (6). p. 855-859. ill. Includes references. (NAL Call No.: 4 AM34P).

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The relationship between phosphorus and copper concentrations in wheat.

Touchton, J.T. Johnson, J.W.; Cunfer, B.M. New York, Marcel Dekker. *Communications in soil science and plant analysis*. 1980. v. 11 (11). p. 1051-1065. ill. 17 ref. (NAL Call No.: S590.C63).

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Nishita, H. Wallace, A.; Romney, E.M.; Kinnear, J. Baltimore, Williams & Wilkins. *Soil science*. July 1981. v. 132 (1). p. 60-65. ill. 10 ref. (NAL Call No.: 56.8 S03).

0370

Residual effects of phosphorus on spring wheat (Soil test levels, Red River Valley, Minnesota).

Varvel, G.E. Severson, R.K. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 51-52. (NAL Call No.: S1.M52).

0371

Residual effects of potassium on spring wheat (Soil levels, Red River Valley, Minnesota).

Varvel, G.E. Severson, R.K. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 53-54. (NAL Call No.: S1.M52).

0372

Residual phosphorus increases the P content of wheat.

Read, D.W.L. BCPFA. Atlanta : Potash & Phosphate Institute. *Better crops with plant food*. Spring 1983..v. 67. p. 26-27. (NAL Call No.: 6 B46).

0373

Response of winter wheat to inhibiting nitrification of fall-applied nitrogen.

Huber, D.M. Warren, H.L.; Nelson, D.W.; Tsai, C.Y.; Shaner, G.E. Madison, Wis., American Society of Agronomy. *Agronomy journal*. July/Aug 1980. v. 72 (4). p. 632-637. 27 ref. (NAL Call No.: 4 AM34P).

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0374

Responses of some crop species to applied and residual levels of zinc (Wheat, barley).
Safaya, N.M. Malakondaiah, N. New York, Marcel Dekker. Journal of plant nutrition. 1981. v. 3 (1/4). p. 483-492. ill. 13 ref. (NAL Call No.: QK867.J67).

0375

Rotation nitrogen study, Waseca, 1982 (Fertilizer needs crop rotation, corn, soybeans, wheat, Minnesota).
Randall, G.W. MXMRA. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 109-111. (NAL Call No.: S1.M52).

0376

Sampling for yellowberry control (Durum wheat, related to irrigation and fertilization practices).
Pryor, A. San Francisco, California Farmer Publishing Co. California farmer. Feb 21, 1981. v. 254 (4). p. 32-G. (NAL Call No.: S1.C185).

0377

Scientists find fungus can help wheat resist drought (U.S. Department of Agriculture microbiologist James R. Ellis, vesicular-arbuscular mycorrhizae).
Washington : The Office. Major news releases and speeches - United States Department of Agriculture, Office of Governmental and Public Affairs. Aug 12/19, 1983. Aug 12/19, 1983. p. 14-15. (NAL Call No.: aS21.A8U51).

0378

Soil profile and site characteristics related to winter wheat response to potassium fertilizers.
Schaff, B.E.SSSJD. Skogley, E.O. Madison : The Society. Journal - Soil Science Society of America. Nov/Dec 1982. v. 46 (6). p. 1207-1211. 25 ref. (NAL Call No.: 56.9 S03).

0379

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Evans, S.D. Schrader, C.R.; Jokela, W.E. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 101-106. (NAL Call No.: S1.M52).

0380

Soybeans: variety, fertilizer, growth regulator, antitranspirant, and planting-after-wheat studies on the High Plains of eastern New Mexico (Yields).
Fuehring, H.D. Finkner, R.E. Las Cruces. Research reportNew Mexico. Agricultural Experiment Station. June 1978. June 1978. (372). 12 p. ill. 8 ref. (NAL Call No.: 100 N465R).

0381

Spring wheat varietal tolerance to application of difenzoquat or MCPA-dicamba (Herbicides).
Edwards, I.B. Miller, S.D. Champaign, Ill., The Conference. Proceedings ... annual meeting.North Central Weed Control Conference. 1978. v. 33. p. 57-60. ill. 2 ref. (NAL Call No.: 79.9 N81).

0382

Starter fertilizer study--spring wheat (Calcareous soils, Minnesota).
Varvel, G.E. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 44-45. (NAL Call No.: S1.M52).

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Starter fertilizer study--Spring wheat (Minnesota).
Varvel, G.E. MXMRA. Meredith, H. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 45-46. (NAL Call No.: S1.M52).

0384

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Varvel, G.E. MXMRA. Severson, R.K. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1983. 1983. (2 rev.). p. 55-56. (NAL Call No.: S1.M52).

0385

Uptake by wheat of cadmium and other heavy metal contaminants in phosphate fertilizers.
Mortvedt, J.U. Mays, D.A.; Osborn, G. Madison, Wis., American Society of Agronomy. Journal of environmental quality. Apr/June 1981. v. 10 (2). p. 193-197. 19 ref. (NAL Call No.: QH540.J6).

0386

Use of DPX 3778
(3-(*p*-chlorophenyl)-6-methoxy-s-triazine-2,4-(--1H, 3H) dione-triethanolamine) to produce hybrid wheat seed (Chemical pollen control).
Johnson, R.R. Brown, C.M. Madison, Crop Science Society of America. *Crop science*. Nov/Dec 1978. v. 18 (6). p. 1026-1028. ill. 7 ref. (NAL Call No.: 64.8 C883).

0387

Wheat grain protein content can predict nitrogen need (Fertilizer application guidelines, Colorado, Nebraska, Kansas).
Goos, R.J. Westfall, D.; Ludwick, A. Atlanta, Potash & Phosphate Institute. *Better crops with plant food*. Spring 1982. v. 66. p. 16-17. ill. (NAL Call No.: 6 B46).

0388

Wheat: relations between some physical and chemical properties.
Tkachuk, R. Kuzina, F.D. Ottawa, Agricultural Institute of Canada. *Canadian journal of plant science*. Jan 1979. v. 59 (1). p. 15-20. ill. 16 ref. (NAL Call No.: 450 C16).

0389

Winter wheat response to nitrogen fertilizer in no-till annual cropping and conventional tillage wheat-fallow rotation (Oregon).
Rasmussen, P.E. OASPA. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1983. Report of Columbia Basin agricultural research. June 1983. (680). p. 16-17. (NAL Call No.: 100 OR3M).

0390

Yield response of wheat to starter fertilizer in northwestern Minnesota, 1981.
Jokels, W.E. O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 195-196. (NAL Call No.: S1.M52).

PLANT PHYSIOLOGY AND BIOCHEMISTRY

0391

Aluminum tolerances of two wheat genotypes related to nitrate reductase activities (*Triticum aestivum*, acid soil tolerance, effects on the two nitrate reductase systems, toxicity, chlorosis).
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0392

Aluminum toxicity and DNA synthesis in wheat roots (*Triticum aestivum*, cultivars, physiological processes).
Wallace, S.U. AGUOAT. Anderson, I.C. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 5-8. Includes references. (NAL Call No.: 4 AM34P).

0393

Assessing winter wheat dry matter production via spectral reflectance measurements (useful in providing an estimate of residue production for erosion control and as a potential source for feed and energy).
Aase, J.K. Siddoway, F.H. New York, Elsevier. Remote sensing of environment. Sept 1981. v. 11 (4). p. 267-277. ill. 27 ref. (NAL Call No.: Q184.R4).

0394

Availability of phosphorus from 17 rock phosphates in moderately and weakly acidic soils as determined by ^{32}P (phosphorus isotope) dilution, A value, and total P uptake methods (Wheat, chemical extraction methods, tracer technique).
Kucey, R.M.N. Bole, J.B. Baltimore, Md. : Williams & Wilkins. Soil science. Aug 1984. v. 138 (2). p. 180-188. Includes references. (NAL Call No.: 56.8 S03).

0395

Changes in wheat leaf polysomal messenger RNA populations during the early stages of rust infection (*Puccinia graminis*). Effects of chloramphenicol and lincomycin on cell-free translation by polysomes from healthy and infected leaves.
Pure, G.A. Chakravorty, A.K.; Scott, K.J. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Sept 1980. v. 66 (3). p. 520-524. ill. 28 ref. (NAL Call No.: 450 P692).

0396

Characterization of lignin in situ by photoacoustic spectroscopy (White pine, *Pinus*, oak, *Quercus*, maple, *Acer*, wheat, *Triticum*). Gould, J.M. Rockville : American Society of Plant Physiologists. Plant physiology. Nov 1982. v. 70 (5). p. 1521-1525. ill. 26 ref. (NAL Call No.: 450 P692).

0397

Chemical composition of winter wheat forage grown where grass tetany and bloat occur (Metabolic diseases of cattle).
Stewart, B.A. Grunes, D.L.; Mathers, A.C.; Horn, F.P. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1981. v. 73 (2). p. 337-347. ill. 30 ref. (NAL Call No.: 4 AM34P).

0398

Chloride effects on water potentials and yield of winter wheat infected with take-all root rot (*Gaeumannomyces graminis*, Oregon).
Christensen, N.W. Taylor, R.G.; Jackson, T.L.; Mitchell, B.L. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1981. v. 73 (6). p. 1053-1058. 29 ref. (NAL Call No.: 4 AM34P).

0399

Chloroplast DNA levels and the control of chloroplast division in light-grown wheat leaves (*Triticum aestivum*).
Boffey, S.A. Leech, R.M. Rockville, American Society of Plant Physiologists. Plant physiology. June 1982. v. 69 (6). p. 1387-1391. ill. 15 ref. (NAL Call No.: 450 P692).

0400

Comparison between Kjeldahl and near infrared protein analyses on vegetative and head samples of wheat (Cultivars receiving different nitrogen treatments).
Klepper, L. Wilhelmi, K. Madison, Wis., Crop Science Society of America. Crop science. Nov/Dec 1979. v. 19 (6). p. 923-925. ill. 5 ref. (NAL Call No.: 64.8 C883).

0401

Computer program for calculating DRIS (Diagnosis and Recommendation Integrated System) indices (Nutrient insufficiencies, maize, soybeans, sorghum, potatoes, wheat, rubber, sugarcane, sunflower, alfalfa). Letzsch, W.S. CSOSA. Sumner, M.E. New York : Marcel Dekker. Communications in soil science and plant analysis. 1983. v. 14 (9). p. 811-815. Includes references. (NAL Call No.: 811-815).

(PLANT PHYSIOLOGY AND BIOCHEMISTRY)

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N813).

0402

Crown-depth soil temperatures and winter protection for winter wheat survival (Cold hardening).
Aase, J.K. AR-W. Siddoway, F.H. Madison, Wis., The Society. Journal. Soil Science Society of America. Nov/Dec 1979. v. 43 (6). p. 1229-1233. ill. 22 ref. (NAL Call No.: 56.9 S03).

0408

Effect of starter fertilizer solutions on wheat emergence, stand and fall growth.
Rasmussen, P.E. OR-AR-W. Wilkins, D.E.; Rickman, R.W. Corvallis, Or., The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1980. June 1980. (571). p. 48-52. (NAL Call No.: 100 OR3M).

0403

The diagnosis of nitrogen deficiency in wheat by means of a critical nitrate concentration in stem bases.

Papastylianou, I. Graham, R.D.; Puckridge, D.W. New York, Marcel Dekker. Communications in soil science and plant analysis. 1982. v. 13 (6). p. 473-485. ill. 21 ref. (NAL Call No.: S590.C63).

0409

Effects of ammonium on growth and nutrient assimilation by wheat / by Walter Jacob Cox.
Cox, Walter Jacob, 1943. 1971. Thesis (Ph.D.)--University of California, Davis, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xiii, 92 leaves ; 21 cm. Bibliography: leaves 89-92. (NAL Call No.: DISS 72-17,900).

0404

Dry matter accumulation, mineral concentrations, and nutrient distribution in winter wheat.

Karlen, D.L. AR-50. Whitney, D.A. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1980. v. 72 (2). p. 281-288. ill. 15 ref. (NAL Call No.: 4 AM34P).

0410

Effects of soil aeration, water, and nitrogen fertilization on nutrition, yield, and quality of wheat / by Manuel Anaya.
Anaya, Manuel (Manuel G.), 1939. 1972. Thesis (Ph.D.)--University of California, Riverside, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xiii, 105 leaves ; 21 cm. Bibliography: p. 84-89. (NAL Call No.: DISS 72-22,046).

0405

Effect of selenium and cadmium additions to soil on their concentrations in lettuce and wheat.
Cary, E.E. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1981. v. 73 (4). p. 703-706. ill. 14 ref. (NAL Call No.: 4 AM34P).

0411

Elements in major raw agricultural crops in the United States. 1. Cadmium and lead in lettuce, peanuts, potatoes, soybeans, sweet corn, and wheat.

Wolnik, K.A.JAFCA. Fricke, F.L.; Capar, S.G.; Braude, G.L.; Meyer, M.W. Washington : American Chemical Society. Journal of agricultural and food chemistry. Nov/Dec 1983. v. 31 (6). p. 1240-1244. maps. Includes references. (NAL Call No.: 381 J8223).

0406

Effect of dicamba on RNA, and protein of wheat and wild buckwheat and on nucleohistone formation / by Willie Eugene Arnold.
Arnold, Willie Eugene, 1943. 1969. Thesis (Ph.D.)--North Dakota State University, 1969. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. vii, 67 leaves ; 21 cm. Bibliography: leaves 62-67. (NAL Call No.: DISS 70-25,499).

0412

Evaluation of methane generator sludge as a soil amendment (Sludge obtained from *Festuca arundinacea*, maize, sorghum, soybeans, wheat, carbon dioxide evolution, Missouri).

Atalay, A. Blanchard, R.W. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1984. v. 13 (3). p. 341-344. ill. Includes references. (NAL Call No.: QH540.J6).

0407

The effect of leaf pubescence on wheat leaf rust infection (*Puccinia recondita* f. sp. *tritici*).

McVey, M.A. Statler, G.D. Grand Forks, N.D. : The Academy. Proceedings of the North Dakota Academy of Science. Apr 1984. v. 38. p. 94. Includes 3 references. (NAL Call No.: 500

(PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0413

Exudation of glyphosate from wheat (*Triticum aestivum*) plants and its effects on interplanted corn (*Zea mays*) and soybeans (*Glycine max*) (Growth regulator, herbicide uptake, no-tillage).

Rodrigues, J.U.V. Worsham, A.D.; Corbin, F.T. Champaign, Ill., Weed Science Society of America. *Weed science*. May 1982. v. 30 (3). p. 316-320. Includes 22 ref. (NAL Call No.: 79.8 W41).

0414

Frost desiccation: an osmotic model (Wheat, cabbage, economic plants, hardiness, freeze injuries).

Williams, R.J. Boca Raton, Fla., CRC Press. *Analysis and improvement of plant cold hardiness*. 1981. 1981. p. 89-115. 7 ref. (NAL Call No.: SB781.A52).

0415

Gas chromatographic quantitative analysis and persistence of dimethoate and dimethoxon residues on and in wheat plants (Organophosphorous insecticide).

Lee, Y.W. Westcott, N.D. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry*. July/Aug 1981. v. 29 (4). p. 860-862. ill. 8 ref. (NAL Call No.: 381 J8223).

0416

Genetic control of shikimate dehydrogenase in hexaploid wheat (*Triticum*).

Neuman, P.R. BIGEB. Hart, G.E. New York : Plenum Press. *Biochemical genetics*. Oct 1983. v. 21 (9/10). p. 963-968. ill. Includes references. (NAL Call No.: QR73.B5).

0417

Genetic studies of rate of emergence and percent emergence under controlled temperature and moisture levels in crosses of winter wheat (*Triticum aestivum L.*) / by Carlos Llosa Baluarte.

Llosa Baluarte, Carlos, 1929. 1970. Thesis (Ph.D.)--Purdue University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xiii, 126 leaves ; 21 cm. Includes bibliographies. (NAL Call No.: DISS 71-9,430).

0418

Grain protein content as an indicator of N (nitrogen) sufficiency for winter wheat.
Goos, R.J. Westfall, D.G.; Ludwick, A.E.; Goris, J.E. Madison, Wis., American Society of Agronomy. *Agronomy journal*. Jan/Feb 1982. v. 74 (1). p. 130-133. Includes ref. (NAL Call No.: 4 AM34P).

0419

Growth regulator of wheats, *Triticum aestivum L.*, noninfested and infested with races of Hessian fly, *Mayetiola destructor* (Say) / by Eileen Jane Settle Rathke.
Rathke, Eileen Jane Settle, 1940. 1971. Thesis (Ph.D.)--Purdue University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xvii, 132 leaves ; 21 cm. Bibliography: leaves 67-75. (NAL Call No.: DISS 71-20,532).

0420

Ice formation and freezing injury in actively growing cereals (Wheat).
Single, W.V. Marcellus, H. Boca Raton, Fla., CRC Press. *Analysis and improvement of plant cold hardiness*. 1981. 1981. p. 17-33. 74 ref. (NAL Call No.: SB781.A52).

0421

In vivo determination of parameters of nitrate utilization in wheat (*Triticum aestivum L.*) seedlings grown with low concentration of nitrate in the nutrient solution.

Baer, G.R. Collet, G.F. Rockville, Md., American Society of Plant Physiologists. *Plant physiology*. Dec 1981. v. 68 (6). p. 1237-1243. 25 ref. (NAL Call No.: 450 P692).

0422

Increases in phosphatase and beta-glucosidase activities in wheat seedlings in response to phosphorus-deficient growth.

Smyth, D.A. Chevalier, P. New York, N.Y. : Marcel Dekker. *Journal of plant nutrition*. 1984. v. 7 (8). p. 1221-1231. ill. Includes references. (NAL Call No.: QK867.U67).

0423

Induction of aluminum tolerance in wheat seedlings by low doses of aluminum in the nutrient solution.

PLPPA. Aniol, A. Rockville, Md. : American Society of Plant Physiologists. *Plant physiology*. Nov 1984. v. 76 (3). p. 551-555. Includes 24 references.

(PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0424

Inhibition of pitted morning glory (*Ipomoea lacunosa* L.) and certain other weed species by phytotoxic components of wheat (*Triticum aestivum* L.) straw (in no-till cropping systems).

Liebl, R.A. JCECD. Worsham, A.D. New York : Plenum Press. Journal of chemical ecology. Aug 1983. v. 9 (8). p. 1027-1043. ill. Includes references. (NAL Call No.: QD415.A1J6).

0425

Isolation and freezing tolerances of mesophyll cells from cold-hardened and nonhardened wheat rye (Mechanisms of freezing injury and tolerance).

Singh, J. Rockville, Md., American Society of Plant Physiologists. Plant physiology. May 1981. v. 67 (5). p. 906-909. ill. 15 ref. (NAL Call No.: 450 P692).

0426

Light and dark controls of nitrate reduction in wheat (*Triticum aestivum* L.) protoplasts.

Reed, A.J. Canvin, D.T. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Feb 1982. v. 69 (2). p. 508-513. Includes 28 ref. (NAL Call No.: 450 P692).

0427

Long-term N-P (nitrogen and phosphorus) fertilizer and climate influences on morphology and yield components of spring wheat.

Black, A.L. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 651-657. 2 p. ref. (NAL Call No.: 4 AM34P).

0428

Metabolism of diclofop-methyl in root-treated wheat and oat seedlings (Herbicidal selectivity).

Jacobson, A. Shimabukuro, R.H. Washington, D.C. : American Chemical Society. Journal of agricultural and food chemistry. July/Aug 1984. v. 32 (4). p. 742-746. ill. Includes 21 references. (NAL Call No.: 381 J8223).

0429

Nutritional value of hard red spring wheat grain protein as influenced by fertilization and cultivar.

Syltie, P.W. Dahnke, W.C.; Harrold, R.L. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1982. v. 74 (2). p. 366-371. Includes ref. (NAL Call No.: 4 AM34P).

0430

Phytochemical nature of wheat (*Triticum aestivum* L.) and barley (*Hordeum vulgare* L.) resistance to the cereal leaf beetle (*Oulema melanopus* (L.)) / by John Irving Willard.

Willard, John Irving. Ann Arbor, Mich. University Microfilms International 1976. Thesis--Michigan State University, 1975. Facsimile produced by microfilm-xerography. vii, 65 leaves. Includes bibliographies. (NAL Call No.: DISS 76-12,546).

0431

Protective systems that have evolved in plants (Barley, wheat, freeze injuries).

Olien, C.R. Smith, M.N. Boca Raton, Fla., CRC Press. Analysis and improvement of plant cold hardiness. 1981. 1981. p. 61-87. ill. 110 ref. (NAL Call No.: SB781.A52).

0432

Protein content and amino acid composition of seven wheat cultivars subjected to water stress: effects of nitrogen fertilizer treatments.

Dubetz, S. Gardiner, E.E. New York, Marcel Dekker. Journal of plant nutrition. 1980. v. 2 (5). p. 517-523. 10 ref. (NAL Call No.: QK867.J67).

0433

Reduction in atrazine toxicity to winter wheat by the growth retardant CCC / by Kenneth Kirkland.

Kirkland, Kenneth. Ann Arbor, Mich. University Microfilms 1973. Thesis--Oregon State University, 1973. Facsimile produced by microfilm-xerography. 166 leaves. Bibliography: leaves 119-129. (NAL Call No.: DISS 73-7,837).

0434

The relationship between cell injury and osmotic volume reduction. III. Freezing injury and frost resistance in winter wheat.

Williams, R.J. Hope, H.J. New York, Academic Press. Cryobiology. Apr 1981. v. 18 (2). p. 133-145. ill. 30 ref. (NAL Call No.: QH324.C7).

0435

Response of sorghum and wheat to different K+/Na⁺ (potassium/sodium ion) ratios at varying osmotic potentials (Salt stress, tolerance).

Devitt, D. Stolzy, L.H.; Jarrell, W.M. Madison, Wis. : American Society of Agronomy. Agronomy journal. July/Aug 1984. v. 76 (4). p. 681-688. ill. Includes references. (NAL Call No.: 4 AM34P).

(PLANT PHYSIOLOGY AND BIOCHEMISTRY)

0436

Role of hydration state and thiol-disulfide status in the control of thermal stability and protein synthesis in wheat embryo.
Fahey, R.C. Di Stefano, D.L.; Meier, G.P.; Bryan, R.N. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. June 1980. v. 65 (6). p. 1062-1066. ill. 18 ref. (NAL Call No.: 450 P692).

0437

Rye (*Secale cereale* L.) and wheat (*Triticum aestivum* L.) mulch: the suppression of certain broadleaved weeds and the isolation and identification of phytotoxins.
ACSMC. Shilling, D.G. Liebl, R.A.; Worsham, D. Washington, D.C. : The Society. ACS Symposium series - American Chemical Society. Based on a "Symposium on the Chemistry of Allelopathy, Biochemical Interactions Among Plants," April 1984, St. Louis, Missouri.~ Literature review. 1985. (268). p. 243-271. ill. Includes 55 references.

0438

Small grain crop forage potential. I. Biological and chemical determinants of quality, and yield (Wheat, oats, triticale, barley).
Cherney, J.H. Marten, G.C. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 227-231. Includes ref. (NAL Call No.: 64.8 C883).

0439

Small grain crop forage potential. II. Interrelationships among biological, chemical, morphological, and anatomical determinants of quality (Wheat, oats, triticale, barley).
Cherney, J.H. Marten, G.C. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 240-245. ill. Includes ref. (NAL Call No.: 64.8 C883).

0440

Soft wheat breeding in the United States.
Patterson, F.L. Allan, R.E. St. Paul, Minn., American Association of Cereal Chemists, c1981. Soft wheat : production, breeding, milling, and uses / edited by W. T. Yamazaki and C. T. Greenwood. p. 33-98. 185 ref. (NAL Call No.: SB191.W5S61).

0441

Soil temperature and wheat straw mulch effects on plant development and nutrient content and uptake by wheat / by Darryl E. Smika.
Smika, Darryl E. (Darryl Eugene), 1933. 1969. Thesis (Ph.D.)--Kansas State University, 1969. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. ii, 133 leaves : ill. ; 21 cm. Bibliography: leaves 100-105. (NAL Call No.: DISS 69-21,142).

0442

Timing, localization, and control of wheat germ agglutinin synthesis in developing wheat embryos (*Triticum aestivum*).
Triplett, B.A. Quatrano, R.S. New York, Academic Press. Developmental biology. June 1982. v. 91 (2). p. 491-496. ill. Includes 1 p. ref. (NAL Call No.: 442.8 D49).

0443

Wheat residue and nitrogen placement effects on wheat growth in the greenhouse (Nitrogen immobilization during straw decomposition causing yield decrease).
Elliott, L.F. Cochran, V.L.; Papendick, R.I. Baltimore, Williams & Wilkins. Soil science. Jan 1981. v. 131 (1). p. 48-52. 11 ref. (NAL Call No.: 56.8 S03).

PLANT TAXONOMY AND GEOGRAPHY

0444

Cultural variation within *Typhula idahoensis* and *Typhula ishikariensis* and the species concept (Wheat pathogens, taxonomy, Interspecies hybrids).

Bruehl, G.W. Machtnes, R. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1980. v. 70 (9). p. 867-871. ill. 16 ref. (NAL Call No.: 464.8 P56).

0445

A new species of *Pythium (okanoganense)* isolated from wheat beneath snow in Washington (cause of death of winter wheat).

Lipps, P.E. Bronx, N.Y., The New York Botanical Garden. *Mycologia*. Nov/Dec 1980. v. 72 (6). p. 1127-1133. ill. 13 ref. (NAL Call No.: 450 M99).

PROTECTION OF PLANTS

0446

Chemical control in intensive wheat cultivation.

Obst, A. Minneapolis, Minn. : Published for the Congress by Burgess Pub., c1981. Proceedings of symposia : IX International Congress of Plant Protection, Washington, D.C., U.S.A., August 5-11, 1979 / editor, Thor Kommedahl. p. 448-451. Includes 1 p. ref. (NAL Call No.: SB951.15 1979).

0447

The CIMMYT's (International Maize and Wheat Improvement Center) interantional approach to breeding disease-resistant wheat.

Dubin, H.J. Rajaram, S. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1982. v. 66 (10). p. 967-971. ill., map. 15 ref. (NAL Call No.: 1.9 P69P).

0448

Compendium of wheat diseases.

Wiese, Maurice Victor, 1940. St. Paul The Society c1977. xii, 106 p. : ill. (some col.) ; 28 cm. Includes bibliographies and index. (NAL Call No.: SB608.W5W46).

0449

Degradation of malathion on wheat and corn of various moisture contents (Toxicity, stored-grain insect pests).

Kadoum, A.M. LaHue, D.W. College Park, Entomological Society of America. Journal of economic entomology. Apr 15, 1979. v. 72 (2). p. 228-229. ill. 4 ref. (NAL Call No.: 421 J822).

0450

Disease control (Wheat, includes seed treatment).

Willis, W. Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). p. 17-19. ill. (NAL Call No.: 275.29 K13EX).

0451

Drift of glyphosate sprays applied with aerial and ground equipment (Wheat, herbicide injuries).

Yates, W.E. Akesson, N.B. Champaign, Ill., Weed Science Society of America. Weed science. Nov 1978. v. 26 (6). p. 597-604. ill. 12 ref. (NAL Call No.: 79.8 W41).

0452

Effect of nonhost cultivars (alfalfa, barley, beans, onion, potatoes, wheat) on *Heterodera schachtii* population dynamics (Nematodes). Griffin, G.D. Ames, Iowa, Society of Nematologists. Journal of nematology. Jan 1980. v. 12 (1). p. 53-57. ill. 12 ref. (NAL Call No.: QL391.N4J62).

0453

Effect of sewage sludge applications on phosphorus and metal concentrations in fractions of corn and wheat kernels. Hinesly, T.D. Sudarski-Hack, V. St. Paul, Minn., American Association of Cereal Chemists. Cereal chemistry. July/Aug 1979. v. 56 (4). p. 283-287. ill. 14 ref. (NAL Call No.: 59.8 C33).

0454

Effect of storage of fungicide-treated (wheat and barley cereal seed on subsequent seed performance. II. Mancozeb and carbendazim + mancozeb.

Hampton, J.G. Wellington, Department of Scientific and Industrial Research. New Zealand journal of experimental agriculture. June 1979. v. 7 (2). p. 207-214. ill. 6 ref. (NAL Call No.: S542.A1N45).

0455

Effects of liming an acid soils amended with sewage sludge enriched with Cd, Cu, Ni, and Zn (cadmium, copper, nickel, zinc) on yield and Cd content of wheat grain (Phytotoxicity).

Bingham, F.T. Page, A.L. Madison, American Society Of Agronomy. Journal of environmental quality. Apr/June 1979. v. 8 (2). p. 202-207. ill. 18 ref. (NAL Call No.: QH540.J6).

0456

EPTC (S-ethyl dipropylthiocarbamate) induced modification of gibberellin biosynthesis (Wheat, herbicide injury).

Wilkinson, R.E. Ashley, D. Champaign, Ill., Weed Science Society of America. Weed science. May 1979. v. 27 (3). p. 270-274. ill. 23 ref. (NAL Call No.: 79.8 W41).

0457

The farm pesticide industry.

Eichers, T.R. Washington, D.C., The Department. Extract: The primary objective of this study is to analyze the nature of the pesticide industry by smaller component markets (submarkets) and evaluate its structure, conduct, and performance. The study also examines some of the implications of pesticide regulations on the pesticide industry and on farm pesticide

(PROTECTION OF PLANTS)

use. Agricultural economic report - United States Dept. of Agriculture. Sept 1980. Sept 1980. (461). 24 p. 39 ref. (NAL Call No.: A281.9 AG8A).

0458

Increase in linolenic acid is not a prerequisite for development of freezing tolerance in wheat.

De La Roche, A.I. Bethesda, American Society of Plant Physiologists. Plant physiology. Jan 1979. v. 63 (1). p. 5-8. ill. 17 ref. (NAL Call No.: 450 P692).

0459

Integrated crop management for dryland small grain production in Montana (Wheat, barley, limited plant-available water, insect, disease, weed and herbicide injuries, yields).

Nissen, S.J. Juhnke, M.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1984. v. 68 (9). p. 748-752. ill. Includes 12 references. (NAL Call No.: 1.9 P69P).

0460

The interaction of protectants with EPTC on field bean, and tri-allate on wheat (Herbicide injury).

Blair, A.M. London. Annals of applied biology. May 1979. v. 92 (1). p. 105-111. ill. 10 ref. (NAL Call No.: 442.8 AN72).

0461

Metabolic and ultrastructural changes associated with flooding at low temperature in winter wheat and barley.

Pomeroy, M.K. Andrews, C.J. Bethesda, Md., American Society of Plant Physiologists. Plant physiology. Oct 1979. v. 64 (4). p. 635-639. ill. 22 ref. (NAL Call No.: 450 P692).

0462

Mole control (Pests of tulips, lilies, carrots, peas potatoes, corn, oats, wheat).

Kuhn, L.W. Corvallis, Or., The Service. Extension circular.Oregon State University. Extension Service. Oct 1979. Oct 1979. (987). 4 p. ill. (NAL Call No.: 275.29 OR32C).

0463

Nitrate fertilizer timing, irrigation, protein, and yellow berry in durum wheat (in the desert area of Imperial Valley, California).

Robinson, F.E. Cudney, D.W. Madison. Agronomy journalAmerican Society of Agronomy. Mar/Apr 1979. v. 71 (2). p. 304-308. ill. 10 ref. (NAL Call No.: 4 AM34P).

0464

Registration of Wheeler wheat (New cultivars, breeding for disease and insect resistance).

Starling, T.M. Roane, C.W.; Camper, H.M. Jr. Madison, Wis. : Crop Science Society of America. Crop science. July/Aug 1984. v. 24 (4). p. 826-827. Includes references. (NAL Call No.: 64.8 C883).

0465

Relation of temperature to ethylene dibromide desorption from fumigated wheat (Residues).

Dumas, T. Bond, E.J. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. Nov/Dec 1979. v. 27 (6). p. 1206-1209. ill. 5 ref. (NAL Call No.: 381 J8223).

0466

Response of maize and wheat to sulfur dioxide (Air pollution injuries).

Laurence, J.A. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. June 1979. v. 63 (6). p. 468-471. ill. 6 ref. (NAL Call No.: 1.9 P69P).

0467

Rhizosphere microorganisms and (wheat) roots stained with europium chelate and fluorescent brightener (Effect of the insecticide diazinon and of several plant growth regulators).

Johnen, B.G. Oxford. Soil biology and biochemistry. 1978. v. 10 (6). p. 495-502. ill. 16 ref. (NAL Call No.: S592.7.A1S6).

0468

Soft wheat breeding in the United States.

Patterson, F.L. Allan, R.E. St. Paul, Minn., American Association of Cereal Chemists, c1981. Soft wheat : production, breeding, milling, and uses / edited by W. T. Yamazaki and C. T. Greenwood. p. 33-98. 185 ref. (NAL Call No.: SB191.W5S61).

(PROTECTION OF PLANTS)

0469

Soil persistence of napropamide (Herbicide residues, wheat, maize, injuries).
Romanowski, R.R. Borowy, A. Champaign, Ill., Weed Science Society of America. *Weed science*. Mar 1979. v. 27 (2). p. 151-153. ill. 6 ref. (NAL Call No.: 79.8 W41).

0470

Starling, *Sturnus vulgaris*, damage to sprouting wheat in Tennessee and Kentucky, U.S.A.
Dolbeer, R.A. Stickley, A.R. Jr. Amsterdam, Elsevier Scientific Publishing Company. *Protection ecology*. Sept 1979. v. 1 (3). p. 159-169. ill., map. 14 ref. (NAL Call No.: S589.7.P7).

0471

Tillage systems for Illinois (Includes pest and disease control for maize, soybeans, wheat).
Siemens, J.C. Shurtleff, M.C. Urbana, Ill., The Service. Circular.Illinois. University. Cooperative Extension Service. June 1979. June 1979. (1172). 22 p. ill. 1 ref. (NAL Call No.: 275.29 IL62C).

0472

Toxicity of anaerobic metabolites accumulating in winter wheat seedlings during ice encasement.

Andrews, C.J. Pomeroy, M.K. Bethesda, American Society of Plant Physiologists. *Plant physiology*. July 1979. v. 64 (1). p. 120-125. ill. 23 ref. (NAL Call No.: 450 P692).

0473

Ultrastructural and enzymic studies of cell membranes from ice-encased and noniced winter wheat seedlings.

Pomeroy, M.K. Andrews, C.J. Bethesda, Md., American Society of Plant Physiologists. *Plant physiology*. Nov 1979. v. 64 (5). p. 695-701. ill. 16 ref. (NAL Call No.: 450 P692).

0474

Varieties (Wheat, yields, disease and insect resistance).
Wilkins, H. Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). p. 3-6. ill. (NAL Call No.: 275.29 K13EX).

0475

Wheat and wild mustard response to dicamba (herbicide, phytotoxicity).
Dobrzanski, A. Nalewaja, J.D. Champaign, Ill., The Conference. *Proceedings ... annual meeting.North Central Weed Control Conference. 1978. v. 33. p. 61-63. ill. 1 ref. (NAL Call No.: 79.9 N81).*

0476

Wheat production handbook (Includes culture, diseases and pests, harvesting, storage, cost and return planning, fertilizing).
Manhattan, Kan., The Service. C.Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). 29 p. ill. 1 ref. (NAL Call No.: 275.29 K13EX).

PESTS OF PLANTS - GENERAL AND MISC.

0477

Development and utilization of a synthetic diet for the greenbug, *Schizaphis graminum* (Rond.), for use in determining the factor or factors responsible for resistance in barley and wheat / by Donald C. Cress.

Cress, Donald Chauncey, 1941. Ann Arbor, Mich. University Microfilms 1971. Thesis--Oklahoma State University, 1969. Facsimile produced by microfilm-xerography. xi, 146 leaves. Bibliography: leaves 132-137. (NAL Call No.: DISS 70-21,365).

0478

Development of an integrated pest management program for wheat in the semiarid regions of the western United States.

McIntyre, G.A. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 183-196. Includes references. (NAL Call No.: aSB191.W5N38 1982).

0479

The development of headblight of wheat caused by *Gibberella zaea* (Schw.) Petch and *Helminthosporium sativum* P. K. and B. / by Axel Langrad Andersen.

Andersen, Axel Langrad, 1941. (East Lansing, Mich.) Michigan State College of Agriculture and Applied Science 1947. Thesis--Michigan State College of Agriculture and Applied Science. 3, 106 leaves, (5) leaves of plates : ill. Bibliography: leaves 100-106. (NAL Call No.: SB608.W5A5).

0480

Factors affecting yield of winter wheat grazed by geese.

WLSBA. Kahl, R.B. Samson, F.B. Bethesda, Md. : The Society. Wildlife Society bulletin. Fall 1984. v. 12 (3). p. 256-262. Includes references.

0481

Wheat pests, diseases and armyworms. (Kentucky) University of Kentucky, Cooperative Extension Service 1982. Pesticide Applicator Training collection ~Cassette title: Wheat diseases and armyworms. 33 slides : col. + 1 sound cassette (12:10 min.) + 1 script. (NAL Call No.: Slide no.13).

PESTS OF PLANTS - INSECTS

0482

The abundance and reproductive activity of common Carabidae in a winter wheat crop.

Jones, M.G. Oxford, Blackwell Scientific Publications. Ecological entomology. Feb 1979. v. 4 (1). p. 31-43. ill. 37 ref. (NAL Call No.: QL461.E4).

Specific Cooperative Agreement~"CRIS no. 3090-20241-002A.". (3) leaves ; 28 cm. (NAL Call No.: SB189.5.C5).

0483

Acceptance of wheat bran bait (containing insecticide, Nosema locustae) by species of rangeland grasshoppers.

Onsager, J.A. Henry, J.E.; Foster, R.N.; Staten, R.T. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1980. v. 73 (4). p. 548-551. 8 ref. (NAL Call No.: 421 J822).

0488

Breeding for greenbug *Schizaphis graminum* (Rondani) resistance in wheat and other small grains.

Gardenhire, J.H. TX. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1980. July 1980. (1451). p. 237-244. 40 ref. (NAL Call No.: 100 T31M).

0484

Adult seedcorn maggots in soybeans relay intercropped into winter wheat (*Delia platura*, *Glycine max*, *Triticum aestivum*).

Hammond, R.B. EVETB. Jeffers, D.L. College Park : Entomological Society of America. Environmental entomology. Oct 1983. v. 12 (5). p. 1487-1489. Includes references. (NAL Call No.: QL461.E532).

0489

Breeding for insect resistance (host plants, alfalfa, wheat, maize, cotton).

Jenkins, J.N. Ames : Iowa State University Press, 1981. Plant Breeding II : (proceedings) / edited by Kenneth J. Frey. p. 291-308. 2 p. ref. (NAL Call No.: SB123.P6 1979).

0485

The anatomy, histology, and cytology of the greenbug, *Schizaphis graminum* (Rondani), in relation to factors responsible for resistance in barley and wheat / by Prakash Narain Saxena. Saxena, Prakash Narain. 1969. Thesis (Ph.D.)--Oklahoma State University, 1969. Also issued as photocopy of typescript (DISS 70-21,475)~Vita. xii, 147, (20) leaves of plates ; 28 cm. Bibliography: leaves 99-106. (NAL Call No.: SB945.G7S3).

0490

Breeding for resistance to insects in wheat.

Gallun, R.L. TX-AR-NC. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1980. July 1980. (1451). p. 245-262. ill. Bibliography p. 260-262. (NAL Call No.: 100 T31M).

0486

Bracon Lissogaster Mues, a parasite of the wheat stem sawfly by H.W. Somsen and Philip Luginbill, Jr.

Somsen, H. W. (Harry W.). Washington, D.C. U.S. Dept. of Agriculture 1956. 7 p. : ill. -. Bibliography: p. 7. (NAL Call No.: Fiche S-69 no. 1153).

0491

Cereal leaf beetle (*Oulema melanopus*): interaction with and ovipositional adaptation to a resistant wheat.

Wellso, S.G. College Park, Md., Entomological Society of America. Environmental entomology. June 1979. v. 8 (3). p. 454-457. ill. 9 ref. (NAL Call No.: QL461.E532).

0492

Cereal leaf beetle (*Oulema melanopus* (L.)) population densities and winter wheat yields (Michigan).

Webster, J.A. Smith, D.H. Jr. Guildford, Eng. : Butterworths. Crop protection. Dec 1983. v. 2 (4). p. 431-436. ill. Includes references. (NAL Call No.: SB599.C8).

0487

Breeding and genetics of Hessian fly resistant Hard Red Spring wheats / principal investigator: Fred Cholick; ADODR: J.H. Hatchett.

Cholick, Fred. (Brookings, S.D.? Dept. of Plant Science, S.D. State University, Agricultural Experiment Station? 1983?). Cover title ~"Final report. ~At head of title: Research Agreement:

0493

Chinch bug (Heteroptera: Lygaeidae) control with insecticides on wheat, field corn, and grain sorghum, 1981 (*Blissus leucopterus leucopterus*, *Chlorpyrifos*, *carbofuran*, *carbaryl*).

Peters, L.L. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1983. v. 76 (1). p. 178-181.

Includes references. (NAL Call No.: 421 J822).

0494

Chromosomal location of genes for resistance to greenbug in 'Largo' and 'Amigo' wheats (*Triticum tauschii*, *Schizaphis graminum*, *Triticum aestivum*, inheritance).

Hollenhorst, M.M. CRPSA. Joppa, L.R. Madison : Crop Science Society of America. Crop science. Jan/Feb 1983. v. 23 (1). p. 91-93. Includes references. (NAL Call No.: 64.8 C883).

0495

Chromosome location of the H5 gene for resistance to the Hessian fly in wheat (*Mayetiola destructor*).

Roberts, J.J. Gallun, R.L. Washington, D.C. : American Genetic Association. The Journal of heredity. Mar/Apr 1984. v. 75 (2). p. 147-148. Includes references. (NAL Call No.: 442.8 AM3).

0496

Compatibility of insecticide-fungicide wheat seed treatments with respect to germination, seedling emergence, and greenbug (*Schizaphis graminum*) control.

Pike, K.S. Glazer, M. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1980. v. 73 (6). p. 759-761. 21 ref. (NAL Call No.: 421 J822).

0497

Concentrations of 80:20 grain fumigant (CC14-CS2) in (grain elevator)-handling equipment during transfers of fumigated wheat.

Storey, C.L. Martin, C.R.; Sukkestad, D.R. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1981. v. 74 (2). p. 188-190. ill. 6 ref. (NAL Call No.: 421 J822).

0498

Control of wheat streak mosaic virus with vector resistance in wheat (Wheat curl, *Eriophyes tulipae*, wheat curl mite as insect vector, Kansas).

Martin, T.J. Harvey, T.L.; Bender, C.G.; Seifers, D.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 963-964. Includes 14 references. (NAL Call No.: 464.8 P56).

0499

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Harvey, T.L. Martin, T.J. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1979. v. 72 (6). p. 854-855. ill. 11 ref. (NAL Call No.: 421 J822).

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0501

Cultivar response to wheat strawworm (*Harmolita grandis*, insect resistance, yield loss).

Martin, T.J. CRPSA. Harvey, T.L. Madison : Crop Science Society of America. Crop science. Nov/Dec 1982. v. 22 (6). p. 1233-1235. 4 ref. (NAL Call No.: 64.8 C883).

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D-genome sources of resistance in *Triticum tauschii* to Hessian fly (*Mayetiola destructor*).

Hatchett, J.H. Gill, B.S. Washington, D.C., American Genetic Association. The Journal of heredity. Mar/Apr 1981. v. 72. (2). p. 126-127. 10 ref. (NAL Call No.: 442.8 AM3).

0503

Damage to wheat seed quality and yield by the rice stink bug and southern green stink bug (Hemiptera:Pentatomidae) (*Nezara viridula*, *Oebalus pugnax*).

Viator, H.P. JEENAI. Pantoja, A.; Smith, C.M. College Park : Entomological Society of America. Journal of economic entomology. Dec 1983. v. 76 (6). p. 1410-1413. Includes references. (NAL Call No.: 421 J822).

0504

Determination of carbon dioxide production by prairie grain wireworm (*Ctenicera aeripennis destructor*) and germinating wheat seeds using mass fragmentography.

Westcott, N.D. Lee, Y.W.; Doane, J.F. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1980. v. 73 (4). p. 561-563. ill. 5 ref. (NAL Call No.: 421 J822).

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Disease and insect control through breeding:
Resistance to Hessian fly and greenbug (Pests of wheat in the United States).
Hatchett, J.H. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 162-165. (NAL Call No.: aSB191.W5N38 1982).

0506

Disease and insect control through breeding:
Resistance to viruses (Diseases of wheat, vectors, fungi).
Brown, C.M. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 166-170. (NAL Call No.: aSB191.W5N38 1982).

0507

Duration of feeding by larvae of the Hessian fly (*Mayetiola destructor*) and growth of susceptible wheat seedlings.
Asavanich, A.P. Gallun, R.L. College Park, Md. Annals Entomological Society of America. Mar 15, 1979. v. 72 (2). p. 218-221. ill. 6 ref. (NAL Call No.: 420 EN82).

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Ear structure and the resistance of cereals to aphids (*Sitobion avenae* on wheat, *Triticum*, and barley, *Hordeum*).
Watson, S.J. Dixon, A.F.G. Guildford, Eng. : Butterworths. Crop protection. Mar 1984. v. 3 (1). p. 67-76. ill. Includes references. (NAL Call No.: SB599.C8).

0509

The effect of cereal growth stages on the reproductive activity of *Sitobion avenae* and *Metopolophium dirhodum* (Oats, winter wheat, aphid resistance).
Watt, A.D. London. Annals of applied biology. Mar 1979. v. 91 (2). p. 147-157. ill. 44 ref. (NAL Call No.: 442.8 AN72).

0510

Effect of fall or spring infection and sources of tolerance of barley yellow dwarf of winter wheat (Aphid vector, resistance, virus, yield loss).

Cisar, G. Brown, C.M.; Jedlinski, H. Madison, Wis.. Crop Science Society of America. Crop science. May/June 1982. v. 22 (3). p. 474-478. 28 ref. (NAL Call No.: 64.8 C883).

0511

Effect of leaf pubescence in wheat on the bird cherry oat aphid (Homoptera:Aphidae) (*Rhopalosiphum padi*).

Roberts, J.J. JEENAI. Foster, J.E. College Park : Entomological Society of America. Journal of economic entomology. Dec 1983. v. 76 (6). p. 1320-1322. Includes references. (NAL Call No.: 421 J822).

0512

Effect of wheat streak mosaic virus on twelve hard red spring wheat cultivars (vectored by the wheat curl mite *Eriophyes tulipae*).

Jons, V.L. Timian, R.G.; Lamey, H.A. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Sept/Oct 1981. v. 39 (2). p. 17-18. ill. 5 ref. (NAL Call No.: 100 N813B).

0513

Effect of wheat vernalization on *Rhopalosiphum padi* L. survival (*Triticum aestivum*, *Triticum turgidum*, bird-cherry oat aphid).

Chen, B.H. CRPSAY. Foster, J.E.; Ohm, H.W. Madison : Crop Science Society of America. Crop science. Nov/Dec 1983. v. 23 (6). p. 1125-1127. Includes references. (NAL Call No.: 64.8 C883).

0514

Effects of cold temperatures and grazing on greenbug (*Schizaphis graminum*) populations in wheat in Noble County, Oklahoma, 1975-76.

Arnold, D.C. Lawrence, Kan., The Society. Journal of the Kansas Entomological Society. July 1981. v. 54 (3). p. 571-577. 4 ref. (NAL Call No.: 420 K13).

0515

Effects of crop rotation, tillage, and weed management systems on black cutworm (Lepidoptera: Noctuidae) infestations in corn (following soybeans or wheat, *Agrotis ipsilon*). Johnson, T.B. Turpin, F.T.; Schreiber, M.M.; Griffith, D.R. College Park, Md. : Entomological Society of America. Journal of economic entomology. Aug 1984. v. 77 (4). p. 919-921. Includes 7 references. (NAL Call No.:

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421 J822).

0516

Effects of rice (*Oebalus pugnax* F.) and southern green (*Nezara viridula* L.) stink bug damage on wheat seed yield and quality (Field experiments, Louisiana).

Viator, H.P. Pantoja-Lopez, A.; Smith, C.M. Baton Rouge : The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1982. 1982. p. 140-141. (NAL Call No.: 100 L936).

0517

Effects of stinkbug (*Nezara viridula*, *Oebalus pugnax*) feeding activity on soft red winter wheat quality.

Viator, H.P. Smith, C.M. Baton Rouge, The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1980. 1980. p. 38-39. (NAL Call No.: 100 L936).

0518

Effects of wheat leaf pubescence on the Hessian Fly (*Mayetiola destructor*).

Roberts, J.J. Gallun, R.L. College Park, Entomological Society of America. Journal of economic entomology. Apr 15, 1979. v. 72 (2). p. 211-214. ill. 8 ref. (NAL Call No.: 421 J822).

0519

The efficacy of several insecticides for pale western cutworm control and their effects on yield of winter wheat (*Agrotis orthogonia*, Kansas).

DePew, L.J. Lawrence, Kan., The Society. Journal of the Kansas Entomological Society. Apr 1982. v. 55 (2). p. 349-352. Includes 3 ref. (NAL Call No.: 420 K13).

0520

Efficacy of the natural enemies of grain sorghum aphids (Homoptera:Aphididae). JKESA. Kring, T.J. Gilstrap, F.E. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. July 1984. v. 57 (3). p. 460-467. Includes 28 references.

0521

Evaluation of baiting techniques for sampling wireworms (Coleoptera: Elateridae) infesting wheat in Washington (*Ctenicera pruinina*, *Limonius canus*).

Toba, H.H. JEENA. Turner, J.E. College Park : Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 850-855. Includes references. (NAL Call No.: 421 J822).

0522

Expression and inheritance of resistance to Hessian fly (*Mayetiola destructor*) in synthetic hexaploid wheats derived from *Triticum tauschii* (Coss) Schmal.

Hatchett, J.H. Martin, T.J.; Livers, R.W. Madison, Wis., Crop Science Society of America. Crop science. Sept/Oct 1981. v. 21 (5). p. 731-734. 10 ref. (NAL Call No.: 64.8 C883).

0523

Feeding habits, reproduction, and sexual determination of the convergent lady beetle, *Hippodamia convergens* (Guer.) (Biological control of the greenbug, *Schizaphis graminum* on wheat and grain sorghum).

Chedester, L.D. TX. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. Texas. Agricultural Experiment Station. Oct 1979. Oct 1979. (1437). 4 p. ill. 11 ref. (NAL Call No.: 100 T31M).

0524

Frequency dependence of the dielectric properties of wheat and the rice weevil / by Stuart Owen Nelson.

Nelson, Stuart Owen, 1927. 1972. Thesis (Ph.D.)--Iowa State University, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xi, 210 leaves ; 21 cm. Bibliography: leaves 150-157. (NAL Call No.: DISS 72-19,997).

0525

Further differentiation of genetic factors in wheat for resistance to the Hessian fly by C.A. Suneson and W.B. Noble.

Suneson, C. A. Washington, D.C. U.S. Dept. of Agriculture 1950. 8 p. - Bibliography: p. 7-8. (NAL Call No.: Fiche S-69 no.1004).

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0526

Genotypic variation in leaf water potential, stomatal conductance and abscisic acid concentration in spring wheat subjected to artificial drought stress.

Quarrie, S.A. Jones, H.G. London, Academic Press. Annals of botany. Sept 1979. v. 44 (3). p. 323-332. ill. 24 ref. (NAL Call No.: 450 AN7).

0527

Grain sorghum leaf and stem feeding insects (Includes pests of oats and wheat).

Jarratt, J.H. Starkville, Miss., The Service. Information sheet - Mississippi State University, Cooperative Extension Service. Jan 1982. Jan 1982. (1160). 2 p. (NAL Call No.: S544.3.M7M5).

0528

Granular application of phorate granules for control of chinch bugs on winter wheat, 1981 (*Blissus leucopterus leucopterus*).

Kindler, S.D. Pruess, K.P.; Spomer, S.M. College Park : Entomological Society of America. Insecticide and acaricide tests. 1982. v. 7. p. 198. (NAL Call No.: SB950.A1I49).

0529

The greenbug (Aphididae, pest of wheat and barley).

Pike, K.S. Klostermeyer, E.C.; Retan, A.H.; Peterson, V. Pullman, Wash., The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Mar 1982. Mar 1982. (1003). 2 p. ill. Ref. (NAL Call No.: 275.29 W27P).

0530

Greenbug (*Schizaphis graminum*) control in dryland wheat (*Hippodamia convergens*).

Daniels, N.E. Chedester, L.D. College Station, Tex., The Station. PR - Texas Agricultural Experiment Station. Nov 1980. Nov 1980. (3732). 7 p. 7 ref. (NAL Call No.: 100 T31P).

0531

Greenbug (*Schizaphis graminum*) trapping at two heights in the Texas Panhandle (Wheat).

Daniels, N.E. College Station, Tex., The Station. MP.Texas. Agricultural Experiment Station. Apr 1979. Apr 1979. (1418). 4 p. ill. 21 ref. (NAL Call No.: 100 T31M).

0532

Growth regulator of wheats, *Triticum aestivum* L., noninfested and infested with races of Hessian fly, *Mayetiola destructor* (Say) / by Eileen Jane Settle Rathke.

Rathke, Eileen Jane Settle. 1940. 1971. Thesis (Ph.D.)--Purdue University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xvii, 132 leaves ; 21 cm. Bibliography: leaves 67-75. (NAL Call No.: DISS 71-20,532).

0533

Hessian flies (*Mayetiola destructor*). Enough maggots are overwintering to cause trouble this spring. Either deep plow, use granules, or plant a different crop (Wheat).

Brookings, South Dakota Agricultural Experiment Station. South Dakota farm and home research. Feb 1979. v. 30 (1). p. 3-5. ill. (NAL Call No.: 100 SD82S).

0534

Hessian fly (Diptera: Cecidomyiidae) in Washington: distribution, parasites, and intensity of infestations on irrigated and nonirrigated wheat (*Mayetiola destructor*).

Pike, K.S.UKESA. Hatchett, J.H.; Antonelli, A.L. Lawrence : The Society. Journal of the Kansas Entomological Society. July 1983. v. 56 (3). p. 261-266. maps. Includes references. (NAL Call No.: 420 K13).

0535

Hessian fly: host selection and behavior during oviposition, winter biology, and parasitoids (*Mayetiola destructor*, pests of wheat, *Platygaster hiemalis*, natural control, Georgia).

Morill, W.L. Athens, Ga., The Society. Journal of the Georgia Entomological Society. Apr 1982. v. 17 (2). p. 156-167. ill. Includes 15 ref. (NAL Call No.: QL461.G4). -

0536

Hessian fly in northeast Oregon (Wheat pests, control).

Rickman, R.W. Klepper, B.; Rasmussen, P.; Wilkins, D.; Pike, K. Corvallis, Or., The Station. Special report - Oregon Agricultural Experiment Station. June 1981. June 1981. (623). p. 63-64. (NAL Call No.: 100 OR3M).

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0537

Hessian fly in Washington (*Mayetiola destructor*, Pests of wheat).

Pike, K.S. Antonelli, A.L. Pullman, Wash., The Service. Extension bulletin - Washington State University, Cooperative Extension Service. 1981. 1981. (0909). 12 p. ill. Includes 14 ref. (NAL Call No.: 275.29 W27P).

0543

Inheritance of resistance to Hessian fly (*Mayetiola destructor*) derived from *Triticum turgidum* L. (Wheat).

Carlson, S.K. Patterson, F.L. Madison, Crop Science Society of America. Crop science. Nov/Dec 1978. v. 18 (6). p. 1011-1014. ill. 8 ref. (NAL Call No.: 64.8 C883).

0538

Hessian fly (*Mayetiola destructor*): distribution and infestation of wheat in Oklahoma and north Texas.

Hatchett, J.H. Burton, R.L.; Starks, K.J. College Station, Tex., Southwestern Entomological Society. The Southwestern entomologist. Mar 1981. v. 6 (1). p. 34-37. maps. 5 ref. (NAL Call No.: QL461.S65).

0544

Insect control guide for barley, wheat and oats.

Bowen, W.R. CA. Burton, V.E.; Stern, V.M. Berkeley, Calif., The Service. Leaflet - University of California, Cooperative Extension Service. Oct 1980. Oct 1980. (2268). 7 p. (NAL Call No.: S544.3.C2C3).

0539

Hessian fly (*Mayetiola destructor*): resistance of wheat as affected by temperature and duration of exposure.

Sosa, O. Jr. College Park, Md., Entomological Society of America. Environmental entomology. Apr 1979. v. 8 (2). p. 280-281. ill. 8 ref. (NAL Call No.: QL461.E532).

0545

Insect control (Wheat).

Gates, D. Manhattan, Kan., The Service. C. Kansas State University. Cooperative Extension Service. July 1978. July 1978. (529). p. 20-22. ill. (NAL Call No.: 275.29 K13EX).

0540

Hessian fly (*Mayetiola destructor*) problem on spring wheat in South Dakota.

Kantack, B.H. Minneapolis, The Council. Crop production conference report - Crop Quality Council. Crop Quality Council. 1978. 1978. (45th). p. 44-47. ill. (NAL Call No.: 464.9 N813).

0546

Interrelationships among wheat genes for resistance to Hessian fly (*Mayetolia destructor*, cultivars).

Stebbins, N.B. AR-NC. Patterson, F.L.; Gallun, R.L. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1980. v. 20 (2). p. 177-180. ill. 16 ref. (NAL Call No.: 64.8 C883).

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The influence of environment on the expression of trichomes in wheat (Resistant to cereal leaf beetle, *Oulema melanopus*).

Wellso, S.G. Hoxie, R.P. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 879-886. ill. 19 ref. (NAL Call No.: 64.8 C883).

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Interrelationships among wheat genes H3, H6, H9, and H10 for Hessian fly resistance (*Mayetiola destructor*).

Stebbins, N.B. Patterson, F.L.; Gallun, R.L. Madison, Crop Science Society of America. Crop science. Sept/Oct 1982. v. 22 (5). p. 1029-1032. 19 ref. (NAL Call No.: 64.8 C883).

0542

Inheritance of resistance to greenbug toxicity in an amphiploid of *Triticum turgidum*/*Triticum tauschii* (*Schizaphis graminum*).

Joppa, L.R. AR-NC. Timian, R.G.; Williams, N.D. Madison, Wis., Crop Science Society of America. Crop science. May/June 1980. v. 20 (3). p. 343-344. 9 ref. (NAL Call No.: 64.8 C883).

0548

Laboratory insecticide bioassays, *Melanoplus sanguinipes*, Bozeman, Montana, winter, 1975-76 (Rye seedlings, wheat bran).

Mazuranich, P.C. Onsager, J.A. Reprints. United States. Agricultural Research Service. (NAL Call No.: AS21.A8U5/ARS).

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A list of larvae sustained on wheat germ diet. Khalaf, K.T. Lawrence, Kan., The Society. Journal Lepidopterists' Society. 1979. v. 33 (3). p. 196-197. ill. (NAL Call No.: 421 L554).

0550

Losses in yield in spring wheat in South Dakota caused by cereal aphids (*Schizaphis graminum*, *Macrosiphum avenae*, *Rhopalosiphum padi*). Kieckhefer, R.W. Kantack, B.H. College Park, Md., Entomological Society of America. Journal of economic entomology. Aug 1980. v. 73 (4). p. 582-585. ill. 13 ref. (NAL Call No.: 421 J822).

0551

Migration of greenbugs (*Schizaphis graminum*) in the Texas Panhandle in relation to their biotypes (Pest of wheat). Daniels, N.E. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1981. July 1981. (1487). 4 p. ill. 18 ref. (NAL Call No.: 100 T31M).

0552

A new greenbug biotype (*Schizaphis graminum*, wheat, rye, barley, genotypes). Porter, K.B. Peterson, G.L.; Vise, O. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 847-850. 16 ref. (NAL Call No.: 64.8 C883).

0553

Occurrence and importance of Hessian fly in Georgia. GENSAB. Johnson, J.W. Roberts, J.J.; Gardner, W.A.; Foster, J.E. Athens, Ga. : The Society. Journal of the Georgia Entomological Society. Oct 1984. v. 19 (4). p. 538-542. Includes references.

0554

Pale western cutworm (*Agrotis orthogonia*): chemical control and effect on yield of winter wheat in Kansas. DePew, L.J. College Park, Md., Entomological Society of America. Journal of economic entomology. Feb 15, 1980. v. 73 (1). p. 138-140. ill. 8 ref. (NAL Call No.: 421 J822).

0555

The particle morphology and some other properties of chloris striate mosaic virus (*Chloris gayana*, *Nesoclutha pallida*, vectors, wheat).

Francki, R.I.B. Hatta, T. London. Annals of applied biology. Jan 1979. v. 91 (1). p. 51-59. ill., plates. 21 ref. (NAL Call No.: 442.8 AN72).

0556

Phytochemical nature of wheat (*Triticum aestivum* L.) and barley (*Hordeum vulgare* L.) resistance to the cereal leaf beetle (*Oulema melanopus* (L.)) / by John Irving Willard. Willard, John Irving. Ann Arbor, Mich. University Microfilms International 1976. Thesis--Michigan State University, 1975. Facsimile produced by microfilm-xerography. vii, 65 leaves. Includes bibliographies. (NAL Call No.: DISS 76-12,546).

0557

Population dynamics of the greenbug and its parasitoids on winter wheat in central Texas (*Schizaphis graminum*). Kring, T.J. Gilstrap, F.E. College Station : The Station. PR - Texas Agricultural Experiment Station. Sept 1983. Sept 1983. (4140). 9 p. ill. Includes references. (NAL Call No.: 100 T31P).

0558

Positive association of the wheat midge (Diptera: Cecidomyiidae) with glume blotch (*Sitodiplosis mosellana*, *Septoria nodorum*). Wellso, S.G. JEENA. Freed, R.D. College Park : Entomological Society of America. Journal of economic entomology. Oct 1982. v. 75 (5). p. 885-887. Includes references. (NAL Call No.: 421 J822).

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The principal insect enemies of growing wheatby C.L. Marlatt. -. Marlatt, C. L. Washington : U.S. Dept. of Agriculture, 1901. 40 p. : ill., maps -.

0560

Procedures for evaluating wheat streak mosaic virus resistance (*Aceria tulipae* as insect vector). Martin, T.J. Beltsville, Md., Plant Science Research Division, Agricultural Research Service, U.S. Dept. of Agriculture. Plant disease reporter. Dec 1978. v. 62 (12). p. 1062-1066. ill. 6 ref. (NAL Call No.: 1.9 P69P).

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Regional assessment of grasshopper losses to wheat--interaction between weather and population density (Great Plains, North America).

Gage, S.H. Minneapolis, Minn. : Published for the Congress by Burgess Pub., c1981. Proceedings of symposia : IX International Congress of Plant Protection, Washington, D.C., U.S.A., August 5-11, 1979 / editor, Thor Kommedahl. p. 141-143. Includes 1 p. ref. (NAL Call No.: SB951.I5 1979).

0562

Registration of cereal leaf beetle resistant soft red winter wheat germplasm.

CRPSAY. Roberts, J.J. Foster, J.E.; Gallum, R.L.; Patterson, F.L. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1221-1222. Includes 4 references.

0563

Registration of two Hessian fly resistant hard red winter wheat germplasms.

CRPSAY. Merkle, O.G. Hatchett, J.H.; Smith, E.L. Madison, Wis. : Crop Science Society of America. Crop science. Nov/Dec 1984. v. 24 (6). p. 1220. Includes 1 references.

0564

Resistance to biotype C greenbug (*Schizaphis graminum*) in synthetic hexaploid wheats derived from *Triticum tauschii*.

Harvey, T.L. Martin, T.J.; Livers, R.W. College Park, Md., Entomological Society of America. Journal of economic entomology. June 1980. v. 73 (3). p. 387-389. 7 ref. (NAL Call No.: 421 J822).

0565

Response of *Schizaphis graminum* (Homoptera: Aphididae) to drought-stressed wheat, using polyethylene glycol as a matricum.

Sumner, L.C. EVETB. Need, J.T.; McNew, R.W.; Dorschner, K.W.; Eikenbary, R.D. College Park : Entomological Society of America. Environmental entomology. June 1983. v. 12 (3). p. 919-922. ill. Includes references. (NAL Call No.: QL461.E532).

0566

Response of wheat seedlings to actual and simulated migratory grasshopper (*Melanoplus sanguinipes*) defoliation.

Capinera, J.L. Roltsch, W.J. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1980. v. 73 (2). p.

258-261. ill. 21 ref. (NAL Call No.: 421 J822).

0567

The role of stored-product insects in distributing *Salmonella montevideo* in wheat / by Martin H. Crumrine.

Crumrine, Martin H., 1944. 1970. Thesis (Ph.D.)--Kansas State University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. iii, 50 leaves ; 21 cm. Bibliography: leaves 44-49. (NAL Call No.: DISS 71-17,353).

0568

Seasonal captures of spiders (Araneae) in a wheat field and its grassy borders in central Saskatchewan (Natural control agents).

Doane, J.F. Dondale, C.D. Ottawa. Canadian entomologist. Apr 1979. v. 111 (4). p. 439-445. ill. 23 ref. (NAL Call No.: 421 C16).

0569

A sex attractant for males of the early cutworm, *Euxoa tristicula* (Lepidoptera: Noctuidae) (Pest of flax, rape, wheat, and sugarbeets).

Steck, W.F. Struble, D.L. Ottawa. Canadian entomologist. Mar 1979. v. 111 (3). p. 337-341. ill. 16 ref. (NAL Call No.: 421 C16).

0570

Simplified soy pulp-wheat germ diets for rearing the southwestern corn borer, *Diatraea grandiosella* Dyar.

Yin, C.M. Peng, W.K. College Park, Md., The Society. Annals of the Entomological Society of America. July 1981. v. 74 (4). p. 425-427. 7 ref. (NAL Call No.: 420 EN82).

0571

Simulating banks grass mite (Acari: Tetranychidae) population dynamics as a subsystem of a crop canopy-microenvironment model (*Oligonychus pratensis*, pest in corn, sorghum, wheat).

Toole, J.L. Norman, J.M.; Holtzer, T.O.; Perring, T.M. College Park, Md. : Entomological Society of America. Environmental entomology. Apr 1984. v. 13 (2). p. 329-337. Includes references. (NAL Call No.: QL461.E532).

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0572

Studies of the ability of Hessian fly, *Mayetiola destructor* (Say), to stunt winter wheat, *Triticum aestivum* L. / by Robert Allan Byers.

Byers, Robert Allan, 1936. 1971. Thesis (Ph.D.)--Purdue University, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. xi, 121 leaves ; 21 cm. Bibliography: leaves 115-120. (NAL Call No.: DISS 71-20,433).

0573

Survey monitors Hessian fly (*Mayetiola destructor*) population in Ohio wheat.

Lafever, H.N. OH-AR-NC. Sosa, O. Jr.; Gallun, R.L.; Foster, J.E.; Kuhn, R.C. Wooster, The Center. Ohio report on research and development in agriculture, home economics, and natural resources - Ohio Agricultural Research and Development Center. July /Aug 1980. v. 65 (4). p. 51-53. ill., maps. (NAL Call No.: 100 OH3S (3)).

0574

Temperature influence on expression of resistance to Hessian fly (Diptera: Cecidomyiidae) in wheat derived from *Triticum tauschii* (*Mayetiola destructor*).

Tyler, J.M. JEENA. Hatchett, J.H. College Park : Entomological Society of America. Journal of economic entomology. Apr 1983. v. 76 (2). p. 323-326. Includes references. (NAL Call No.: 421 J822).

0575

Tillage systems for Illinois (Includes pest and disease control for maize, soybeans, wheat).

Siemens, J.C. Shurtleff, M.C. Urbana, Ill., The Service. Circular. Illinois. University. Cooperative Extension Service. June 1979. June 1979. (1172). 22 p. ill. 1 ref. (NAL Call No.: 275.29 IL62C).

0576

Ultrastructural studies of greenbug (Hemiptera: Aphididae) feeding damage to susceptible and resistant wheat cultivars (*Schizaphis graminum*).

Al-Mousawi, A.H. AESAA. Richardson, P.E.; Burton, R.L. College Park : The Society. Annals of the Entomological Society of America. Nov 1983. v. 76 (6). p. 964-971. ill. Includes references. (NAL Call No.: 420 EN82).

0577

Ultrastructure of fungal plant virus vectors *Polymyxa graminis* in soilborne wheat mosaic virus-infected wheat and *Polymyxa betae* in beet necrotic yellow vein virus-infected sugarbeet (*Triticum aestivum*, *Beta vulgaris*).

Langenberg, W.G. Giunchedi, L. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1982. v. 72 (9). p. 1152-1158. ill. 25 ref. (NAL Call No.: 464.8 P56).

0578

Wheat arthropod-pest management.

Wilde, G. Boca Raton, Fla., CRC Press. CRC handbook of pest management in agriculture. 1981. v. 3. p. 317-327. 70 ref. (NAL Call No.: SB950.C7).

0579

The wheat jointworm and its control by W.J. Phillips and F.W. Poos . -.
Phillips, W. J. Washington, D.C. : U.S. Dept. of Agriculture, 1940. 13 p. : ill. -.

0580

The wheat jointworm in Oregon, with special reference to its dispersion, injury, and parasitization by T.R. Chamberlin.
Chamberlin, T. R. Washington, D.C. U.S. Dept. of Agriculture 1941. 48 p. : ill., maps -. Bibliography: p. 47. (NAL Call No.: Fiche S-69 no.784).

0581

Wheat pests, diseases and armyworms.

(Kentucky) University of Kentucky, Cooperative Extension Service 1982. Pesticide Applicator Training collection ~Cassette title: Wheat diseases and armyworms. 33 slides : col. + 1 sound cassette (12:10 min.) + 1 script. (NAL Call No.: Slide no.13).

0582

The wheat stem maggot (*Meromyza pratorum*, *Meromyza saltatrix*, Oregon).

Fisher, G.C. Weinzierl, R. Corvallis : The Service. FS, fact sheet - Oregon State University Extension Service. Aug 1983. Aug 1983. (298). 2 p. ill. (NAL Call No.: 275.29 OR36).

(PESTS OF PLANTS - INSECTS)

0583

The wheat stem maggots of the genus *Meromyza* in the Pacific Northwest by L.P. Rockwood, Sarah K. Zimmerman, and T.R. Chamberlin. Rockwood, L. P. Washington, D.C. U.S. Dept. of Agriculture 1947. 18 p. : ill. -. Bibliography: p. 17-18. (NAL Call No.: Fiche S-69 no. 928).

0584

Wheat varieties resistant to the Hessian fly and their reactions to stem and leaf rusts by W.B. Cartwright and R.G. Shands. Cartwright, W. B. Washington, D.C. U.S. Dept. of Agriculture 1944. 6 p. -. (NAL Call No.: Fiche S-69 no. 877).

0585

Wild goatgrass gives greenbug resistance to wheat (*Schizaphis graminum*). Martin, W. Washington, D.C., The Service. Agricultural research - United States Agricultural Research Service. Oct 1981. v. 30 (4). p. 13. ill. (NAL Call No.: 1.98 AG84).

0586

Winter and spring distribution and density of banks grass mite (Acari: Tetranychidae) in adjacent wheat and corn (*Oligonychus pratensis*, Nebraska, Kansas). Holtzer, T.D. Perring, T.M.; Johnson, M.W. Lawrence, Kan. : The Society. Journal of the Kansas Entomological Society. Apr 1984. v. 57 (2). p. 333-335. Includes references. (NAL Call No.: 420 K13).

0587

Winter survival of greenbugs (*Schizaphis graminum*) in the Texas Panhandle (Pest of wheat and sorghum). Daniels, N.E. TX. Chedester, L.D. College Station, Tex., The Station. MP - Texas, Agricultural Experiment Station. Mar 1980. Mar 1980. (1447). 4 p. ill. 16 ref. (NAL Call No.: 100 T31M).

0588

Wireworms: control, sampling methodology, and effect on wheat yield in Montana. Morrill, W.L. Athens : The Society. Journal of the Georgia Entomological Society. Jan 1984. v. 19 (1). p. 67-71. Includes references. (NAL Call No.: QL461.G4).

0589

Within-field distribution of greenbug (Homoptera: Aphididae) and its parasitoids in Texas winter wheat (*Schizaphis graminum*, *Rhopalosiphum padi*, *Macrosiphum avenae*, *Rhopalosiphum maidis*). Kring, T.J. Gilstrap, F.E. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1983. v. 76 (1). p. 57-62. Includes references. (NAL Call No.: 421 J822).

0590

1980 Kansas field crop insect control recommendations.

Brooks, Leroy. Gates, Dell E. 1980. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 27 p. (NAL Call No.: C 431).

0591

1981 Kansas field crops insect control recommendations.

Brooks, Leroy. Gates, Dell E. 1981. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 28 p. (NAL Call No.: C 431).

PESTS OF PLANTS - NEMATODES

0592

Control of cereal cyst nematode in wheat, 1980 (Wheat (*Triticum aestivum* 'Condor'), cereal cyst nematode; *Heterodera avenae*).
Brown, R.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 203. (NAL Call No.: 464.9 AM31R).

0593

The development and influence of *Meloidogyne incognita* and *Meloidogyne javanica* on wheat.
Roberts, P.A. Van Gundy, S.D. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1981. v. 13 (3). p. 345-352. 22 ref. (NAL Call No.: QL391.N4J62).

0594

The eelworm disease of wheat and its control Luther P. Byars . -. Byars, Luther P. Washington, D.C. : U.S. Dept. of Agriculture, 1920. 11 p. : ill. -.

0595

Effects of soil temperature and planting date of wheat on *Meloidogyne incognita* reproduction, soil populations, and grain yield.
Roberts, P.A. Van Gundy, S.D.; McKinney, H.E. Ames, Iowa, Society of Nematologists. Journal of nematology. July 1981. v. 13 (3). p. 338-345. ill. 19 ref. (NAL Call No.: QL391.N4J62).

0596

Evaluation of some pesticides in the control of cereal cyst nematode in wheat, 1981 (*Heterodera avenae*, *Triticum aestivum*, *Victoria*).
Brown, R.H. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 20-21. (NAL Call No.: 464.9 AM31R).

0597

Field control of cereal cyst nematode in wheat, 1978 (Wheat (*Triticum aestivum* 'Timgallen', 'Condor', 'Kite', 'Oxley'), cereal cyst nematode; *Heterodera avenae*).
Brown, L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 188-189. (NAL Call No.: 464.9 AM31R).

0598

Influence of time on population development and pathogenicity of *Tylenchorhynchus agri* on *Trifolium pratense*, *Poa pratensis* and *Triticum aestivum*.
Coates-Beckford, P.L. Malek, R.B. Gainesville, Fla., Organization of Tropical American Nematologists. Nematropica. June 1982. v. 12 (1). p. 7-14. 5 ref. (NAL Call No.: SB998.N4N4).

0599

Liquid EDB or EDB in fertilizer for large area control of cereal cyst nematode, 1978 (Wheat (*Triticum aestivum* 'Condor'), cereal cyst nematode; *Heterodera avenae*).
Dube, A.J. Fisher, J.M.; Hancock, T.W.; Gurner, P. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 234. (NAL Call No.: 464.9 AM31R).

0600

Measurement of the vertical migration of *Anguina tritici* (wheat gall nematode) (Steinbuch 1799) Chitwood, 1935 in soil under experimental conditions.
Limber, D.P. AR-NE. Ames, Iowa, Society of Nematologists. Journal of nematology. Oct 1980. v. 12 (4). p. 328-330. ill. 3 ref. (NAL Call No.: QL391.N4J62).

0601

Nematode advisoys programs--status and prospects (Wheat, soybeans, economic crops, United States).

Barker, K.R. Imbriani, J.L. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1984. v. 68 (8). p. 735-741. ill. Includes 18 references. (NAL Call No.: 1.9 P69P).

0602

Pale western cutworms in wheat.

Hagen, Arthur F. Document available from: University of Nebraska-Lincoln, Dept. of Agricultural Communications, Lincoln, Nebraska 68583 1974. Discusses life cycle, description and chemical control methods for pale western cutworm. 1 sheet : ill. (NAL Call No.: Document available from source.).(NAL Call No.: G 74-130).

(PESTS OF PLANTS - NEMATODES)

0603

Pathogenicity of Merlinius brevidens as related to host development (*Triticum aestivum*, nematodes).

Mayol, P.S. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1981. v. 65 (3). p. 248-250. ill. 11 ref. (NAL Call No.: 1.9 P69P).

0604

Pathogenicity of the Columbia root-knot nematode (*Meloidogyne chitwoodi*) on wheat, corn, oat, and barley (Pacific Northwest).
Santo, G.S. O'Bannon, J.H. Ames, Iowa, Society of Nematologists. Journal of nematology. Oct 1981. v. 13 (4). p. 548-550. 2 ref. (NAL Call No.: QL391.N4J62).

0605

A plant assay of soil to assess potential damage to wheat by *Heterodera avenae*.
Simon, A. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1980. v. 64 (10). p. 917-919. ill. 15 ref. (NAL Call No.: 1.9 P69P).

0606

Response of different lines to the control of cereal cyst nematode by EDB, 1979 (Wheat (*Triticum aestivum*), cereal cyst nematode; *Heterodera avenae*).
Dube, A.J. Fisher, J.M.; Rathjen, A.J.; Hancock, T.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 189. (NAL Call No.: 464.9 AM31R).

0607

Those overworked and oft-misused mean separation procedures--Duncan's, LSD (least significant difference), etc. (Fungal disease control, wheat, phytonematodes, fungicides, nematicides).
Swallow, W.H. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 919-921. Includes 5 references. (NAL Call No.: 1.9 P69P).

PLANT DISEASES - GENERAL

0608

Biochemical and histological studies on the nature of leaf rust resistance in wheat / by John Edward Watkins.
Watkins, John Edward. Ann Arbor, Mich. University Microfilms 1976. Thesis--North Dakota State University, 1975. Facsimile produced by microfilm-xerography. x, 106 leaves. Bibliography: leaves 91-97. (NAL Call No.: DISS 76-9,859).

0609

Breeding for resistance to pathogens in wheat. Johnson, D.A. TX. Gilmore, E.C. College Station, Tex., The Station. MP - Texas Agricultural Experiment Station. July 1980. July 1980. (1451). p. 263-275. Bibliography p. 273-275. (NAL Call No.: 100 T31M).

0610

A compilation of plant diseases and disorders in Indiana - 1981 (Trees, ornamentals, turfgrass, vegetables, wheat, corn, soybean, alfalfa). Evans-Ruhl, G.PIACA. Latin, R.X.; Pecknold, P.C.; Scott, D.H. Indianapolis : The Academy. Proceedings of the Indiana Academy of Science. 1981. v. 91. p. 120-139. Includes references. (NAL Call No.: 500 IN2).

0611

Development of an integrated pest management program for wheat in the semiarid regions of the western United States. McIntyre, G.A. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 183-196. Includes references. (NAL Call No.: aSB191.W5N38 1982).

0612

How to spot and control: Common wheat diseases in Montana (Mostly fungal diseases). Dubbs, A. MT. Mathre, D. Bozeman, The Station. Capsule information series.Capsule Inf Ser Mont Agric Exp Stn. May 1979. May 1979. (19). 5 p. ill. 6 ref. (NAL Call No.: S83.M6).

0613

Influence of aluminum toxicity in intergeneric crosses of wheat and rye / by Alfonso Lopez-Benitez. Lopez-Benitez, Alfonso. Ann Arbor, Mich. University Microfilms International 1978. Thesis--Oregon State University, 1977. Facsimile produced by microfilm-xerography. 107 leaves. Bibliography: leaves 89-95. (NAL Call No.: DISS 77-20,153).

0614

The influence of antibiotic production of soil pH on survival of *Cephalosporium gramineum* in infested wheat straw / by Allan Dale Hopp. Hopp, Allan Dale. Ann Arbor, Mich. University Microfilms 1973. Thesis--Washington State University, 1972. Facsimile produced by microfilm-xerography. vii, 28 leaves. Bibliography: leaves 26-28. (NAL Call No.: DISS 73-54).

0615

Registration of Anza wheat (New cultivars, resistance to *Puccinia striiformis* and barley yellow dwarf virus). Qualset, C.O. Vogt, H.E.; Borlaug, N.E. Madison, Wis. : Crop Science Society of America. Crop science. July/Aug 1984. v. 24 (4). p. 827-828. Includes references. (NAL Call No.: 64.8 C883).

0616

Response of winter wheat to inhibiting nitrification of fall-applied nitrogen. Huber, D.M. Warren, H.L.; Nelson, D.W.; Tsai, C.Y.; Shaner, G.E. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1980. v. 72 (4). p. 632-637. 27 ref. (NAL Call No.: 4 AM34P).

0617

Root and crown diseases: major cost factors and yield constraints for wheat (United States). Cook, R.J. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 171-173. (NAL Call No.: aSB191.W5N38 1982).

0618

Wheat disease management.

Wilcoxon, R.D. Boca Raton, Fla., CRC Press.
CRC handbook of pest management in agriculture.
1981. Literature review. v. 3. p. 329-341. 27
ref. (NAL Call No.: SB950.C7).

0619

Wheat, oats and barley seed treatment fungicides.

Willis, William G. 1980. This publication discusses the diseases, insects and chemical effectiveness of treating wheat, oats, and barley seeds with fungicides. It also includes a table of different brands of fungicides and their effectiveness. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 4 p. (NAL Call No.: AF66).

0620

Wheat pests, diseases and armyworms.

(Kentucky) University of Kentucky, Cooperative Extension Service 1982. Pesticide Applicator Training collection ~Cassette title: Wheat diseases and armyworms. 33 slides : col. + 1 sound cassette (12:10 min.) + 1 script. (NAL Call No.: Slide no.13).

PLANT DISEASES - FUNGAL

0621

The activation of triadimefon and its role in the selectivity of fungicide action (Systemic fungitoxic effect, cucumbers, tomatoes, beans and wheat).

Gasztoni, M. Josepovits, G. London Society of Chemical Industry. Pesticide science Society of Chemical Industry. Feb 1979. v. 10 (1). p. 57-65. ill. 18 ref. (NAL Call No.: SB951.P47).

0622

Additive resistance in wheat to *Puccinia striiformis* (cause of stripe rust disease).

Krupinsky, J.M. Sharp, E.L. St. Paul, American Phytopathological Society. *Phytopathology*. Dec 1978. v. 68 (12). p. 1795-1799. ill. 25 ref. (NAL Call No.: 464.8 P56).

0623

Adult-plant leaf rust (*Puccinia recondita*) resistance in PI 250413, an introduction of common wheat (Genetic aspects).

Dyck, P.L. Samborski, D.J. Ottawa, Agricultural Institute of Canada. *Canadian journal of plant science*. Apr 1979. v. 59 (2). p. 329-332. ill. 4 ref. (NAL Call No.: 450 C16).

0624

Adult plant resistance of Thatcher wheat to stem rust (*Puccinia graminis*).

Nazareno, N.R.X. Roelfs, A.P. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Feb 1981. v. 71 (2). p. 181-185. ill. 24 ref. (NAL Call No.: 464.8 P56).

0625

Aerial application of Dithane M-45 on wheat for leaf rust control, 1982 (*Puccinia recondita* on *Triticum aestivum*).

Hagan, A.FNETD. Gudauskas, R.; Chapman, C. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 55. (NAL Call No.: 464.9 AM31R).

0626

Allelic and linkage relations among genes for reaction to wheat stem rust / by Hossein Kaveh. Kaveh, Hossein, 1934. 1968. Thesis (Ph.D.)--North Dakota State University, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. vi, 107 leaves : ill. ; 21 cm. Bibliography: leaves 81-84. (NAL Call No.: DISS 69-12,875).

0627

Allelic and linkage relations among genes for stem rust resistance from *Triticum turgidum*, 'Mindum', 'Acme' selection, 'Palestine', and 'Khapli' (*Puccinia graminis*, host plant, disease).

Williams, N.D. CRPSA. Miller, J.D. Madison : Crop Science Society of America. *Crop science*. Nov/Dec 1982. v. 22 (6). p. 1203-1207. 12 ref. (NAL Call No.: 64.8 C883).

0628

Alternaria triticina (On leaves, leaf sheaths, glumes and grains of *Triticum spp.*, triticale and barley).

Anahosur, K.H. Kew, Eng., The Institute. CMI, descriptions of pathogenic fungi and bacteria. Commonwealth Mycological Institute. 1978. v. 59 (583). 2 p. ill. 2 ref. (NAL Call No.: 462.7 C73).

0629

Analysis of symptoms on spring and winter wheat cultivars inoculated with different isolates of *Septoria nodorum* (*Triticum aestivum*, glume blotch, difference in pathogenicity, plant resistance).

Scharen, A.L. PHYTA. Eyal, Z. St. Paul : American Phytopathological Society. *Phytopathology*. Feb 1983. v. 73 (2). p. 143-147. 15 ref. (NAL Call No.: 464.8 P56).

0630

Application of scanning electron microscopy to paraffin-embedded plant tissues to study invasive processes of plant-pathogenic fungi (*Coprinus psychromorbidus*, wheat).

Gaudet, D.A. Kokko, E.G. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. Sept 1984. v. 74 (9). p. 1078-1080. ill. Includes 9 references. (NAL Call No.: 464.8 P56).

0631

Assessment of interactions between cultivated and wild wheats and *Septoria tritici* (*Triticum*, genomes and cultivars, resistance).

Yechilevich-Auster, M. PHYTA. Levi, E.; Eyal, Z. St. Paul : American Phytopathological Society. *Phytopathology*. July 1983. v. 73 (7). p. 1077-1083. Includes references. (NAL Call No.: 464.8 P56).

0632

The association and dissociation of genes for virulence in wheat stem rust (*Puccinia graminis tritici*).

Knott, O.R. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. Sept 1984. v. 74 (9). p. 1023. Includes 9 references. (NAL Call No.: 464.8 P56).

0633

"Bacterization" seed treatment and banded fertilizers for suppression of take-all root rot of wheat (*Gaeumannomyces graminis*).

Halsey, M.E. Powelson, R.L. Corvallis, Or., The Station. Special report - Oregon Agricultural Experiment Station. July 1981. July 1981. (633). p. 41-46. ill. (NAL Call No.: 100 OR3M).

0634

Banding ammonium and chloride fertilizers for suppression of take-all rot rot of wheat (*Gaeumannomyces graminis* var. *tritici*).

Powelson, R.L. OR. Jackson, T.L.; Halsey, M.E. Corvallis, Or., The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1980. June 1980. (571). p. 64-67. ill. (NAL Call No.: 100 OR3M).

0635

Beating the (dwarf) bunt (*Tilletia controversa*, wheat).

Krings, M. MT. Bozeman, The Service. Focus on Montana agriculture - Cooperative Extension Service, Montana State University. Winter 1979. v. 1 (1). p. 7. ill. (NAL Call No.: S451.M9M9).

0636

Biodegradation of fatty acylamino acids by *Fusarium culmorum* (Wheat seed treatment).

Madhosingh, C. Orr, W. New York, N.Y. : Marcel Dekker. Journal of environmental science and health. Part B. Pesticides, food contaminants, and agricultural wastes. 1984. v. 19 (4/5). p. 491-499. ill. Includes references. (NAL Call No.: TD172.J61).

0637

Biological control attempts using five species of *Bacillus* as seed-treatments of wheat.

Lengkeek, V.H. Otta, J.O. Grand Forks, The Academy. Proceedings of the North Dakota Academy of Science. Apr 1979. v. 33. p. 2. 2 ref. (NAL Call No.: 500 N813).

0638

Biological control attempts using five species of *Bacillus* as seed-treatments of wheat (to control fungal pathogens).

Lengkeek, V.H. Otta, J.O. Pierre, S. Oak., The Academy. Proceedings of the South Dakota Academy of Science. South Dakota Academy of Science. 1979. v. 58. p. 144-156. ill. 17 ref. (NAL Call No.: 500 S082).

0639

Biological control of *Rhizoctonia solani* damping-off with wheat bran culture of *Trichoderma harzianum* (Soilborne pathogens, kidney beans, tomatoes, eggplants).

Hadar, Y. Chet, I. St. Paul, American Phytopathological Society. *Phytopathology*. Jan 1979. v. 69 (1). p. 64-68. ill. 28 ref. (NAL Call No.: 464.8 P56).

0640

Biology and control of *Claviceps purpurea* (Fr.) Tul. on male sterile wheat and barley / by Shivayogi Basaya Puranik.

Puranik, Shivayogi Basaya, 1929. 1970. Thesis (Ph.D.)--Montana State University, 1970.

Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. ix, 69 leaves ; 21 cm.

Bibliography: leaves (65)-69. (NAL Call No.: OISS 71-15,563).

0641

Breakthrough discovery (of Pythium) in wheat.

Yarris, L.C. Washington, D.C., Science and Education Administration, U.S. Dept. of Agriculture. Agricultural research. United States. Dept. of Agriculture. Aug 1979. v. 28 (2). p. 7. ill. (NAL Call No.: 1.98 AG84).

0642

Bunt control with fungicide seed treatments on wheat production, 1980 (Wheat (*Triticum aestivum* 'Triumph 64'), common bunt; *Tilletia foetida*).

Williams, E. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 177-178. (NAL Call No.: 464.9 AM31R).

0643

Bunt of wheat (*Tilletia* spp., Fungi, control).

Hoffman, J.A. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 979-986. ill. 22 ref. (NAL Call No.: 1.9 P69P).

(PLANT DISEASES - FUNGAL)

0644

Calculation of selection coefficients against unnecessary genes for virulence from field data (Puccinia graminis tritici, stem rust in wheat, Triticum aestivum, Erysiphe graminis hordei, powdery mildew in barley, Hordeum vulgare, resistance genes).

Grant, M.W. PHYTA. Archer, S.A. St. Paul : American Phytopathological Society. Phytopathology. Apr 1983. v. 73 (4). p. 547-551. Includes references. (NAL Call No.: 464.8 P56).

0645

Cephalosporium (gramineum) stripe of winter wheat in Wyoming.

Fernandez, J.A. McShane, M.S. St. Paul, Minn., American Phytopathological Society. Plant disease. Dec 1980. v. 64 (12). p. 1117. 3 ref. (NAL Call No.: 1.9 P69P).

0646

Cephalosporium stripe: a new disease in Nebraska wheat.

Boosalis, M.G. Watkins, J.E. Lincoln, The Station. Farm, ranch and home quarterly - Nebraska Agricultural Experiment Station. Spring 1982. v. 29 (1). p. 16-17. ill. (NAL Call No.: 100 N27N).

0647

Cephalosporium stripe of wheat (Cephalosporium gramineum, Montana, Washington, Idaho).

Roth, D.A. Fernandez, J.A. Laramie, Wyo., The Service. Bulletin - Wyoming University, Agricultural Extension Service. Mar 1981. Mar 1981. (742). 2 p. ill. (NAL Call No.: 275.29 W99B).

0648

Chaetoglobosin K: A new plant growth inhibitor and toxin from Diplodia macrospora (Fungal pathogen of corn, toxicity, chicks, wheat).
Cutler, H.G. AR-SO-AR-NE. Crumley, F.G.; Cox, R.H.; Cole, R.J.; Dorner, J.W.; Springer, J.P.; Latterell, F.M.; Thean, J.E.; Rossi, A.E. Washington, D.C., American Chemical Society. Journal of agricultural and food chemistry. Jan/Feb 1980. v. 28 (1). p. 139-142. ill. 16 ref. (NAL Call No.: 381 J8223).

0649

Changes in wheat leaf polysomal messenger RNA populations during the early stages of rust infection (Puccinia graminis). Effects of chloramphenicol and lincomycin on cell-free translation by polysomes from healthy and infected leaves.

Pure, G.A. Chakravorty, A.K.; Scott, K.J. Rockville, Md., American Society of Plant Physiologists. Plant physiology. Sept 1980. v. 66 (3). p. 520-524. ill. 28 ref. (NAL Call No.: 450 P692).

0650

Chemical control of leaf rust and leaf spot diseases of Scout 66 winter wheat, 1979 (Wheat (Triticum aestivum 'Scout 66'), leaf rust; Puccinia recondita, tan spot; Pyrenophora trichostoma, leaf blotch; Septoria tritici).
Watkins, J.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 130. (NAL Call No.: 464.9 AM31R).

0651

Chemical control of leaf rust and leaf spots on winter wheat, 1982 (Puccinia recondita, Septoria tritici, Pyrenophora trichostoma, Triticum aestivum).
Watkins, J.E. FNETD. Wiebe, W.L.; Doupnik, B. Jr. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 68. (NAL Call No.: 464.9 AM31R).

0652

Chemical control of loose smut (Wheat (Triticum aestivum 'WL 711'), loose smut; Ustilago nuda tritici).
Grewal, A.S. Aujla, S.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 180. (NAL Call No.: 464.9 AM31R).

0653

Chemical control of stripe and stem rusts of wheat, 1979 (Wheat (Triticum aestivum), stripe rust; Puccinia striiformis, stem rust; Puccinia graminis tritici).
Brown, J.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 109. (NAL Call No.: 464.9 AM31R).

0654

Chemical control of tan spot and Septoria leaf and glume blotch of wheat, 1980 (Wheat (Triticum aestivum 'Larned'), tan spot; Pyrenophora trichostoma, Septoria leaf and glume blotch; Septoria spp.).
Lengkeek, V.H. Krouse, L.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 115. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0655

Chemical control of wheat foliar diseases, 1980 (Wheat (*Triticum aestivum* 'Coker 68-15'), glume blotch; *Septoria nodorum*).

Sciumbato, G.L. Edwards, N.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 119. (NAL Call No.: 464.9 AM31R).

0656

Chemical seed treatments for controlling seedborne and soilborne common bunt of wheat (Fungus, *Tilletia caries*).

Hoffman, J.A. Waldher, J.T. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1981. v. 65 (3). p. 256-259. 22 ref. (NAL Call No.: 1.9 P69P).

0657

Chloride effects on water potentials and yield of winter wheat infected with take-all root rot (*Gaeumannomyces graminis*, Oregon).

Christensen, N.W. Taylor, R.G.; Jackson, T.L.; Mitchell, B.L. Madison, Wis., American Society of Agronomy. Agronomy journal. Nov/Dec 1981. v. 73 (6). p. 1053-1058. 29 ref. (NAL Call No.: 4 AM34P).

0658

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Weller, D.M. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Nov 1983. v. 73 (11). p. 1548-1553. Includes references. (NAL Call No.: 464.8 P56).

0659

Combating take-all root rot (*Gaeumannomyces graminis* var. *tritici*) of winter wheat in western Oregon.

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0660

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0661

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Jackson, T.L. Powelson, R.L.; Christensen, N.W. Corvallis : The Service. FS, fact sheet - Oregon State University Extension Service. Sept 1983. Sept 1983. (250,rev.). 2 p. (NAL Call No.: 275.29 OR36).

0662

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Jackson, T.L. Powelson, R.L.; Christensen, N.W. Corvallis, Or. : The Service. FS, fact sheet - Oregon State University Extension Service. Sept 1984. (250,rev.). 2 p.

0663

Comparative histology of partial resistance and the nonhost reaction to leaf rust pathogens in barley and wheat seedlings (*Puccinia hordei*, *Puccinia recondita* *tritici*, *Hordeum*, *Triticum*). Niks, R.E. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Jan 1983. v. 73 (1). p. 60-64. ill. 22 ref. (NAL Call No.: 464.8 P56).

0664

Comparative pathogenicity of *Septoria nodorum* isolated from *Triticum aestivum* and *Agropyron* species (Wheat, perennial wheatgrasses).

Krupinsky, J.M. St. Paul, American Phytopathological Society. Phytopathology. June 1982. v. 72 (6). p. 660-661. 15 ref. (NAL Call No.: 464.8 P56).

0665

Comparison of H719 and carboxin for control of wheat bunt disease, 1980 (Wheat (*Triticum aestivum* L. 'Red Chief'), bunt; *Tilletia foetida* (Wall.) Liro).

Bockus, W.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 168. (NAL Call No.: 464.9 AM31R).

0666

Comparison of mercury seed treatment with an experimental chemical combination on wheat, 1981 (Wheat (*Triticum aestivum* 'Dancer', 'Redcoat', 'IL-72'), powdery mildew; *Erysiphe graminis* f.sp. *tritici*).

Frank, J.A. Ayers, J.E.; Cole, H. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 180. (NAL Call No.: 464.9

(PLANT DISEASES - FUNGAL)

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0667

Comparison of the effects of sublethal doses of triadimefon to those of rate-reducing resistance to Erysiphe graminis in wheat (*Triticum aestivum*).

Schein, R.D. Nelson, R.R.; Thomas, G.G.; Royer, M.H.; Borges, O. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. 1984. v. 74 (4). p. 452-456. Includes references. (NAL Call No.: 464.8 P56).

0668

Comparison of the efficacy of fungicides to control leaf rust and stem rust of wheat, 1980 (Wheat (*Triticum aestivum* 'Pak 70'), leaf rust; *Puccinia recondita* f.sp. *tritici*, stem rust; *Puccinia graminis* f.sp. *tritici*).

Khashkeli, A.M. Khanzada, A.L.; Bajeer, M.U.; Jagirdar, H.A.; Pathan, I.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 114. (NAL Call No.: 464.9 AM31R).

0669

A comparison of virulence phenotypes in wheat stem rust (*Puccinia graminis*) populations reproducing sexually and asexually.

Roelfs, A.P. AR-NC. Groth, J.V. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1980. v. 70 (9). p. 855-862. ill. 18 ref. (NAL Call No.: 464.8 P56).

0670

A compendium of information about named genes for low reaction to *Puccinia recondita* in wheat (Leaf rust).

Browder, L.E. Madison, Wis., Crop Science Society of America. *Crop science*. Nov/Dec 1980. v. 20 (6). p. 775-779. 63 ref. (NAL Call No.: 64.8 C883).

0671

Components of rate-reducing resistance in seedlings of four wheat cultivars and parasitic fitness in six isolates of *Erysiphe graminis* f. sp. *tritici*.

Rouse, D.I. Nelson, R.R.; MacKenzie, D.R.; Armitage, C.R. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Nov 1980. v. 70 (11). p. 1097-1100. ill. 20 ref. (NAL Call No.: 464.8 P56).

0672

Composition of wheat straw infested with *Cephalosporium gramineum* and implication for its decomposition in soil (*Triticum aestivum*).
Murray, T.D. PHYTA. Bruehl, G.W. St. Paul : American Phytopathological Society. *Phytopathology*. July 1983. v. 73 (7). p. 1046-1048. Includes references. (NAL Call No.: 464.8 P56).

0673

Control of bunt of wheat with seed treatments, 1979 (Wheat (*Triticum aestivum* 'Olympic'), bunt; *Tilletia caries* and *Tilletia foetida*).
Ballinger, D.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 198. (NAL Call No.: 464.9 AM31R).

0674

Control of common bunt and flag smut, 1978 (Wheat (*Triticum aestivum* 'Mexico 120' and 'Free Gallipoli'), common bunt; *Tilletia caries*, *Tilletia foetida*, frog smut; *Urocystis agropyri*).
Alcock, K.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 196. (NAL Call No.: 464.9 AM31R).

0675

Control of common bunt of wheat (*Tilletia foetida*).
Wiese, M.V. Ravenscroft, A.V. East Lansing, The Station. Research report. Michigan. Agricultural Experiment Station. Sept 1979. Sept 1979. (385). 4 p. ill., map. (NAL Call No.: 284.9 M58).

0676

Control of common bunt of wheat, 1979 (Wheat (*Triticum aestivum* 'Monon'), common bunt; *Tilletia foetida*).
Shaner, G. Finney, R.E.; Scott, D.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 212. (NAL Call No.: 464.9 AM31R).

0677

Control of common bunt of wheat, 1980 (Wheat (*Triticum aestivum* 'Monon'), common bunt; *Tilletia foetida*).
Finney, R.E. Shaner, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 168. (NAL Call No.: 464.9 AM31R).

0678

Control of common bunt of wheat, 1981 (Wheat (*Triticum aestivum* 'Monon'), common bunt; *Tilletia foetida*).

Finney, R.E. Shaner, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 179. (NAL Call No.: 464.9 AM31R).

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0679

Control of common bunt of wheat, 1982 (*Tilletia foetida*, *Triticum aestivum*).

Buechley, G.FNETD. Shaner, G. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 51-52. (NAL Call No.: 464.9 AM31R).

0680

Control of common bunt of winter wheat with experimental seed treatments, 1979 (Wheat (winter) (*Triticum aestivum* 'Cheyenne'), common bunt; *Tilletia foetida*).

Johnston, R.H. Mathre, D.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 206. (NAL Call No.: 464.9 AM31R).

0684

Control of common bunt with systemic seed treatment, 1980 (Wheat (*Triticum aestivum* 'Butte'), common bunt; *Tilletia foetida*).

Johnston, R.H. Metz, S.G.; Mathre, D.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 171-172. (NAL Call No.: 464.9 AM31R).

0685

Control of dwarf bunt of winter wheat, 1979 (Wheat (*Triticum aestivum* 'Wanser'), dwarf bunt; *Tilletia controversa*).

Hoffmann, J.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 205. (NAL Call No.: 464.9 AM31R).

0686

Control of dwarf bunt of winter wheat, 1980 (Wheat (*Triticum aestivum* 'Wanser'), dwarf bunt; *Tilletia controversa*).

Hoffmann, J.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 171. (NAL Call No.: 464.9 AM31R).

0687

Control of dwarf bunt of winter wheat, 1981 (Wheat (*Triticum aestivum* 'Wanser'), dwarf blunt; *Tilletia controversa*).

Hoffmann, J.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 182. (NAL Call No.: 464.9 AM31R).

0688

Control of dwarf bunt of winter wheat, 1982 (*Tilletia controversa* on *Triticum aestivum*).

Hoffman, J.A.FNETD. Waldher, J.T. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 37-38. (NAL Call No.: 464.9 AM31R).

0689

Control of flag smut of wheat with seed treatments, 1979 (Wheat (*Triticum aestivum* 'Paha'), flag smut; *Urocystis agropyri*).

Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 209-210. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0690

Control of flag smut of wheat with seed treatments, 1980 (Wheat (*Triticum aestivum* 'Paha'), flag smut; *Urocystis agropyri*). Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 173-174. (NAL Call No.: 464.9 AM31R).

0691

Control of flag smut of wheat with seed treatments, 1981 (Wheat (*Triticum aestivum* 'Paha'), flag smut; *Urocystis agropyri*). Waldher, J.T. Line, R.F. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 186-187. (NAL Call No.: 464.9 AM31R).

0692

Control of flag smut of wheat with seed treatments, 1982 (*Urocystis agropyri*, *Triticum aestivum*). Line, R.F. FNETD. Waldher, J.T. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 41-42. (NAL Call No.: 464.9 AM31R).

0693

Control of foliar diseases of Arthur wheat with fungicides, 1981 (Wheat (*Triticum aestivum* 'Arthur'), glume blotch; *Septoria nodorum*, leaf rust; *Puccinia recondita*). Reed, H.E. Chambers, A.Y. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 122-123. (NAL Call No.: 464.9 AM31R).

0694

Control of foliar diseases of winter wheat with fungicides, 1982 (*Puccinia recondita*, *Septoria nodorum*, *Septoria tritici*, *Triticum aestivum*). Anzalone, L. Jr. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 50. (NAL Call No.: 464.9 AM31R).

0695

Control of leaf rust and powdery mildew on winter wheat cultivars in eastern Washington, 1979 (Wheat (*Triticum aestivum*), leaf rust; *Puccinia recondita*, powdery mildew; *Erysiphe graminis*). Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 124. (NAL Call No.: 464.9 AM31R).

0696

Control of leaf rust in hard red spring wheat, 1980 (Spring wheat (*Triticum aestivum* 'Thatcher')), leaf rust; *Puccinia recondita*). Lamey, H.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 115. (NAL Call No.: 464.9 AM31R).

0697

Control of leaf rust on wheat, 1979 (Wheat (*Triticum vulgare*), leaf rust; *Puccinia recondita*). Jagirdar, H.A. Khaskheli, A.M.; Khanzada, A.L.; Pathan, I.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 121. (NAL Call No.: 464.9 AM31R).

0698

Control of leaf rust, powdery mildew and *Septoria* leaf spot diseases with Dithane M-45, 1982 (*Puccinia recondita*, *Erysiphe graminis* var. *tritici*, *Septoria tritici*, wheat, *Triticum aestivum*). Stuckey, R.E. FNETD. Tutt, C. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 67. (NAL Call No.: 464.9 AM31R).

0699

Control of leaf rust with foliar applications of Bayleton, 1979 (Wheat (*Triticum aestivum* 'Monon'), leaf rust; *Puccinia recondita*, powdery mildew; *Erysiphe graminis*, speckled leaf blotch; *Septoria tritici*). Shaner, G. Finney, R.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 128. (NAL Call No.: 464.9 AM31R).

0700

Control of leaf rust with seed treatments and foliar sprays, 1982 (*Puccinia recondita* infecting wheat, *Triticum aestivum*). Line, R.R. FNETD. Scott, R.B.; Adams, E.B. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 40. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0701

Control of loose smut of wheat with seed treatment (Wheat (*Triticum aestivum L.* 'S-308'), loose smut; *Ustilago nuda tritici*). Sharma, Y.R. Aujia, S.S.; Grewal, A.S.; Sharma, S.K. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 176-177. (NAL Call No.: 464.9 AM31R).

0702

Control of loose smut of winter wheat with seed treatments, 1979 (Wheat (*Triticum aestivum* 'Tam-101'), loose smut; *Ustilago tritici*). Hansing, E.D. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 201-202. (NAL Call No.: 464.9 AM31R).

0703

Control of loose smut, seed decay and seedling blight of wheat, 1980 (Wheat (*Triticum aestivum* 'Baart'), loose smut; *Ustilago nuda*, seed decay and seedling blight; *Fusarium*, *Pythium* and *Helminthosporium spp.*). Pederson, V.D. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 175-176. (NAL Call No.: 464.9 AM31R).

0704

Control of loose smut, seed decay and seedling blight of wheat, 1981 (Wheat (*Triticum aestivum* 'Baart'), loose smut; *Ustilago nuda*, seed decay and seedling blight; *Fusarium*, *Pythium* and *Helminthosporium spp.*). Pederson, V.D. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 184-185. (NAL Call No.: 464.9 AM31R).

0705

Control of powdery mildew and septoria blight on soft red winter wheat at Rock Springs, Pennsylvania, 1979 (Wheat (*Triticum aestivum*), powdery mildew; *Erysiphe graminis f. sp. tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*). Frank, J.A. Cole, H. Jr.; Marshall, H.G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 120-121. (NAL Call No.: 464.9 AM31R).

0706

Control of powdery mildew and *Septoria* blight with fungicides, 1980 (Wheat (*Triticum aestivum* 'Blueboy', 'Hart'), powdery mildew; *Erysiphe graminis f. sp. tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*). Cole, H. Jr. Pedersen, W.L.; Frank, J.A.; Hatley, E.O. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 109-110. (NAL Call No.: 464.9 AM31R).

0707

Control of powdery mildew and *Septoria* leaf blotch by fungicide sprays, 1981 (Wheat (*Triticum aestivum* 'Roland', 'Hart', 'Potomac'), *Septoria* leaf blotch; *Septoria nodorum*, *Septoria tritici*, powdery mildew; *Erysiphe graminis*). Frank, J.A. Jordan, L.J.; Watson, G.R.; Broscious, S.C.; Cole, H. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 116. (NAL Call No.: 464.9 AM31R).

0708

Control of powdery mildew and *Septoria* leaf blotch by fungicide sprays, 1982 (Erysiphe graminis, *Septoria nodorum*, *Septoria tritici*, *Triticum aestivum*). Cole, H. Jr. Frank, J.A.; Jordan, L.J.; Watson, G.R.; Broscious, S.C. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 54. (NAL Call No.: 464.9 AM31R).

0709

Control of powdery mildew of wheat with fungicides, 1979 (Wheat (*Triticum aestivum* 'Coker 68-15', 'McNair 1003'), powdery mildew; *Erysiphe graminis f. sp. tritici*). Kingsland, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 123. (NAL Call No.: 464.9 AM31R).

0710

Control of powdery mildew on soft red winter wheat at Rock Springs, Pennsylvania, in fumigated and non-fumigated soil, 1979 (Wheat (*Triticum aestivum* 'Blueboy'), powdery mildew; *Erysiphe graminis f. sp. tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*). Cole, H. Jr. Frank, J.A.; Marshall, H.G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 120. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0711

Control of powdery mildew on various wheat cultivars, 1980 (Wheat (*Triticum aestivum*), powdery mildew; *Erysiphe graminis* f.sp. *tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*, leaf rust; *Puccinia recondita* f.sp. *tritici*).

Cole, H. Jr. Pedersen, W.L.; Frank, J.A.; Hatley, E.O. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 110-111. (NAL Call No.: 464.9 AM31R).

0712

Control of powdery mildew on wheat and its subsequent effect on *Septoria* severity and yield, 1981 (Wheat (*Triticum aestivum*), *Septoria* leaf blotch; *Septoria nodorum*; *Septoria tritici*, powdery mildew; *Erysiphe graminis*).

Brosious, S.C. Watson, G.R.; Frank, J.A.; Jordan, L.J.; Thomas, G.; Cole, H. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 114. (NAL Call No.: 464.9 AM31R).

0713

Control of powdery mildew on wheat with Bayleton under two nitrogen fertilization levels, 1980 (Wheat (*Triticum aestivum*), powdery mildew; *Erysiphe graminis* f.sp. *tritici*, leaf rust; *Puccinia recondita* f.sp. *tritici*).

Pedersen, W.L. Cole, H. Jr.; Hatley, E.O.; Frank, J.A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 117-118. (NAL Call No.: 464.9 AM31R).

0714

Control of powdery mildew on wheat, 1982 (*Erysiphe graminis* *tritici* on *Triticum aestivum*).

Anderson, M.G.FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 50. (NAL Call No.: 464.9 AM31R).

0715

Control of powdery mildew, *Septoria* blight, and leaf rust with tilt, 1982 (*Erysiphe graminis* *tritici*, *Septoria nodorum*, *Septoria tritici*, *Puccinia recondita*, *Triticum aestivum*, wheat). Buchholz, C.FNETD. Lengel, M. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 51. (NAL Call No.: 464.9 AM31R).

0716

Control of rusts and powdery mildew on spring wheat and effect of fungicides on plants, 1979 (Wheat (*Triticum aestivum*), stripe rust; *Puccinia striiformis*, leaf rust; *Puccinia recondita*, powdery mildew; *Erysiphe graminis*, phytotoxicity).

Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 125. (NAL Call No.: 464.9 AM31R).

0717

Control of seed- and soil-borne common bunt of spring wheat, 1979 (Wheat (*Triticum aestivum* 'Big-Club'), common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 202-203. (NAL Call No.: 464.9 AM31R).

0718

Control of seed- and soil-borne common bunt of spring wheat, 1980 (Wheat (*Triticum aestivum* 'Big Club') common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 170-171. (NAL Call No.: 464.9 AM31R).

0719

Control of seed- and soil-borne common bunt of spring wheat, 1981 (Wheat (*Triticum aestivum* 'Big Club'), common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 180-181. (NAL Call No.: 464.9 AM31R).

0720

Control of seed- and soil-borne common bunt of winter wheat, 1979 (Wheat (*Triticum aestivum* 'Orin'), common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 203-204. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0721

Control of seed- and soil-borne common bunt of winter wheat, 1980 (Wheat (*Triticum aestivum* 'Orin'), common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 169-170. (NAL Call No.: 464.9 AM31R).

0722

Control of seed- and soil-borne common bunt of winter wheat, 1981 (Wheat (*Triticum aestivum* 'Orin'), common bunt; *Tilletia caries*). Hoffmann, J.A. Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 181-182. (NAL Call No.: 464.9 AM31R).

0723

Control of seed- and soilborne common bunt of winter wheat, 1982 (*Tilletia caries*, *Triticum aestivum*). Hoffmann, J.A. FNETD. Waldher, J.T. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 38-39. (NAL Call No.: 464.9 AM31R).

0724

Control of seed-borne common bunt of spring wheat, 1981 (Wheat (*Triticum aestivum* 'Butte')), common bunt; *Tilletia foetida*). Johnston, R.H. Mathre, D.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 182-183. (NAL Call No.: 464.9 AM31R).

0725

Control of seed-borne common bunt of winter wheat, 1981 (Wheat (*Triticum aestivum* 'Cheyenne')), common bunt; *Tilletia foetida*). Johnston, R.H. Mathre, D.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 183. (NAL Call No.: 464.9 AM31R).

0726

Control of seed-borne common bunt of winter wheat, 1981 (Wheat (*Triticum aestivum* 'Triumph 64')), bunt; *Tilletia foetida*). Backus, W.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 178. (NAL Call No.: 464.9 AM31R).

0727

Control of seed decay and seedling blight of wheat, 1979 (Wheat (*Triticum aestivum* 'Kitt'), seed decay and seedling blight; *Fusarium*, *Pythium* and *Helminthosporium* spp.). Pederson, V.D. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 210-211. (NAL Call No.: 464.9 AM31R).

0728

Control of seed decay and seedling blight of wheat, 1982 (*Fusarium*, *Pythium*, *Helminthosporium* spp., *Triticum aestivum*). Pederson, V.D. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 42-43. (NAL Call No.: 464.9 AM31R).

0729

Control of seedborne common bunt of spring wheat, 1982 (*Tilletia foetida* on *Triticum aestivum*). Johnston, R.H. FNETD. Mathre, D.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 39. (NAL Call No.: 464.9 AM31R).

0730

Control of seedborne common bunt of winter wheat, 1982 (*Tilletia foetida*, *Triticum aestivum*). Williams, E. Jr. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 44. (NAL Call No.: 464.9 AM31R).

0731

Control of *Septoria* leaf blotch with fungicide sprays, 1981 (Wheat (*Triticum aestivum* 'Roland')), *Septoria* leaf blotch; *Septoria nodorum*, *Septoria tritici*). Thomas, G. Cole, H. Jr.; Frank J.; Jordan, L.J.; Watson, G.R. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 124-125. (NAL Call No.: 464.9 AM31R).

0732

Control of *Septoria* leaf blotch with fungicide sprays, 1982 (*Septoria nodorum*, *Septoria tritici*, *Triticum aestivum*, wheat). Cole, H. Jr. FNETD. Frank, J.A.; Jordan, L.J.; Watson, G.R. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 53. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0733

Control of Septoria leaf spot of wheat with Mancozeb, 1980 (Wheat (*Triticum aestivum*), Septoria leaf spot; *Septoria nodorum*).
Kingsland, G. Graham, W.D. Jr.; Edge, B. III. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 114-115. (NAL Call No.: 464.9 AM31R).

0734

Control of spot blotch of wheat by seed treatments, 1981 (Cochliobolus sativus, *Triticum aestivum*).
Luz, W.C. da.FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 36-37. (NAL Call No.: 464.9 AM31R).

0735

Control of spring wheat diseases with foliar sprays in South Dakota, 1982 (yrenophora tritici-repentis, Fusarium spp., *Triticum aestivum*).
Buchenau, G.W.FNETD. Yahnke, M.D. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 50-51. (NAL Call No.: 464.9 AM31R).

0736

Control of stem rust (*Puccinia graminis*) on spring wheat by Triadimefon and Fenapanil.
Rowell, J.B. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1981. v. 65 (3). p. 235-236. 10 ref. (NAL Call No.: 1.9 P69P).

0737

Control of strawbreaker foot rot of winter wheat by fungicides in Washington (*Pseudocercosporalla herpotrichoides*).
Bruehl, G.W. Machmes, R.; Cook, R.J. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 1056-1058. ill. 9 ref. (NAL Call No.: 1.9 P69P).

0738

Control of stripe rust and leaf rust of wheat with seed treatments and effects of treatments on the host (*Puccinia striiformis*, *Puccinia recondita*, *Triticum aestivum*, fungicides, Washington).
Rakotondradona, R. Line, R.F. St. Paul, American Phytopathological Society. Plant disease. Feb 1984. v. 68 (2). p. 112-117. ill. Includes references. (NAL Call No.: 1.9 P69P).

0739

Control of stripe rust and leaf rust with Baytan seed treatments and Bayleton foliar sprays, 1981 (Wheat (*Triticum aestivum* 'Orin'), stripe rust; *Puccinia striiformis*).
Line, R.F. Scott, R.B.; Adams, E.B. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 118-119. (NAL Call No.: 464.9 AM31R).

0740

Control of stripe rust and speckled leaf blotch with fungicides, 1980 (Wheat (*Triticum aestivum* 'Zenith'), stripe rust; *Puccinia striiformis*, speckled leaf blotch; *Septoria tritici*).
Brown, J.S. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 114-115. (NAL Call No.: 464.9 AM31R).

0741

Control of stripe rust in western Washington, 1982 (*Puccinia striiformis* on wheat, *Triticum aestivum*).
Line, R.F.FNETD. Scott, R.B.; Adams, E.B. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 58. (NAL Call No.: 464.9 AM31R).

0742

Control of stripe rust of wheat with fungicides, 1982 (*Puccinia striiformis*, *Triticum aestivum*).
Powelson, R.L.FNETD. Halsey, M.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 62. (NAL Call No.: 464.9 AM31R).

0743

Control of stripe rust with seed treatments and foliar sprays, 1982 (*Puccinia striiformis* on wheat, *Triticum aestivum*).
Line, R.F.FNETD. Scott, R.B.; Adams, E.B. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 40-41. (NAL Call No.: 464.9 AM31R).

0744

Control of stripe rust with systemic fungicide, 1981 (Wheat (*Triticum aestivum* 'Orin', 'Nugaines', 'Yamhill'), stripe rust; *Puccinia striiformis*).
Line, R.F. Scott, R.B.; Adams, E.B. (s.l.), The Society. Fungicide and nematicide tests;

results - American Phytopathological Society. 1982. v. 37. p. 119. (NAL Call No.: 464.9 AM31R).

0745

Control of take-all of wheat with Bayleton and Baytan, 1981 (Wheat (*Triticum aestivum* 'Fielder'), take-all; *Gaeumannomyces graminis*). Line, R.F. Sitton, J.W.; Waldher, J.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 120. (NAL Call No.: 464.9 AM31R).

0746

Control of take-all of wheat, 1981 (*Gaeumannomyces graminis* var. *tritici*, *Triticum aestivum*). Kollmorgen, J.F. FNED. Ballinger, D.J.; Walsgott, D.N. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 57. (NAL Call No.: 464.9 AM31R).

0747

Control of wheat and barley loose smut, 1978 (Wheat (*Triticum aestivum* 'Egret' and 'Pinnacle'), barley (*Hordeum vulgare* 'Lara'), loose smut; *Ustilago nuda*). Alcock, K.T. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 213. (NAL Call No.: 464.9 AM31R).

0748

Control of wheat bunt with seed treatments, 1980 (Wheat (*Triticum aestivum* 'Olympic'), bunt; *Tilletia caries* and *Tilletia foetida*). Ballinger, D.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 167. (NAL Call No.: 464.9 AM31R).

0749

Control of wheat diseases with Bayleton, 1980 (Wheat (*Triticum aestivum* 'Beau', 'Caldwell', and 'Monon'), leaf rust; *Puccinia recondita*, *Septoria* leaf blotch; *Septoria tritici* and *Septoria nodorum*). Finney, R.E. Shaner, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 111. (NAL Call No.: 464.9 AM31R).

0750

Control of wheat diseases with Bayleton, 1981 (Wheat (*Triticum aestivum* 'Beau', 'Caldwell', and 'Monon'), leaf rust; *Puccinia recondita*, *Septoria* leaf blotch; *Septoria tritici* and *Septoria nodorum*, powdery mildew; *Erysiphe graminis*). Finney, R.E. Shaner, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 116. (NAL Call No.: 464.9 AM31R).

0751

Control of wheat diseases with Baylon, 1982 (*Puccinia recondita*, *Septoria tritici*, *Septoria nodorum*, *Triticum aestivum*). Shaner, G. FNED. Buechley, G. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 64. (NAL Call No.: 464.9 AM31R).

0752

Control of wheat diseases with Tilt and Topcop, 1982 (*Puccinia recondita*, *Septoria tritici*, *Septoria nodorum*, *Triticum aestivum*). Buechley, G. FNED. Shaner, G. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 52. (NAL Call No.: 464.9 AM31R).

0753

Control of wheat foliar diseases with fungicides, 1979 (Wheat (*Triticum aestivum* 'Opal'), powdery mildew; *Erysiphe graminis* f. sp. *tritici*, glume blotch; *Septoria nodorum*). Johnston, H.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 121. (NAL Call No.: 464.9 AM31R).

0754

Control of wheat foliar diseases with fungicides, 1981 (Wheat (*Triticum aestivum* 'Coker 68-15'), glume blotch; *Septoria nodorum*, powdery mildew; *Erysiphe graminis* f. sp. *tritici*). Sciumbato, G.L. Edwards, N.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 123-124. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0755

Control of wheat leaf diseases with BEN 8099, 1979 (Wheat (*Triticum aestivum* 'Monon')), leaf rust; *Puccinia recondita*, powdery mildew; *Erysiphe graminis*, speckled leaf blotch; *Septoria tritici*).

Shaner, G. Finney, R.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 128-129. (NAL Call No.: 464.9 AM31R).

0756

Control of wheat loose smut by seed treatments, 1979 (Wheat (*Triticum aestivum* 'Pinnacle')), loose smut; *Ustilago nuda*).

Ballinger, D.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 199. (NAL Call No.: 464.9 AM31R).

0757

Control of wheat loose smut with seed treatments, 1982 (*Ustilago nuda* on *Triticum aestivum*).

Sheridan, J.E. FNED. Dawson, H.V. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 43-44. (NAL Call No.: 464.9 AM31R).

0758

Control of wheat loose smut, 1979 (Wheat (*Triticum aestivum* 'Knox')), loose smut; *Ustilago tritici*).

Shaner, G. Finney, R.E.; Scott, D.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 212-213. (NAL Call No.: 464.9 AM31R).

0759

Control of wheat loose smut, 1980 (Wheat (*Triticum aestivum* 'Monon')), loose smut; *Ustilago tritici*.

Finney, R.E. Shaner, G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 168-169. (NAL Call No.: 464.9 AM31R).

0760

Control of wheat loose smut, 1981 (Wheat (*Triticum aestivum* 'Monon')), loose smut; *Ustilago tritici*.

Shaner, G. Finney, R.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 185. (NAL Call No.: 464.9 AM31R).

0761

Control of wheat stem rust by low receptivity to infection conditioned by a single dominant gene (*Puccinia graminis* f. sp. *tritici* in *Triticum aestivum*).

Rowell, J.B. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Mar 1982. v. 72 (3). p. 297-299. Includes 10 ref. (NAL Call No.: 464.8 P56).

0762

Copper-carbonate treatment for stinking smut of wheat : excerpts from 1926 annual reports of county extension agents / F.C. Meier, and M.C. Wilson.

Meier, F. C. (Washington, D.C.? U.S. Dept. of Agriculture, Extension Service?) 1927. 27 leaves ; 27 cm. -. (NAL Call No.: 1.9 Ex892Esc no. 40).

0763

Crater disease of summer wheat in African drylands (*Periconia macrospinosa*, *Pythium oligandrum*, *Rhizoctonia cerealis*, and *Rhizoctonia solani*, phytotoxins).

Scott, D.B. Visser, C.P.N. Beltsville, Md., The Administration. Plant disease reporter. United States. Dept. of Agriculture. Science and Education Administration. Oct 1979. v. 63 (10). p. 836-840. ill. 15 ref. (NAL Call No.: 1.9 P69P).

0764

Crew winter wheat (Varieties, cultivation, performance, fungus disease resistance and susceptibility, milling and baking).

Morrison, K.J. Allan, R.E.; Peterson, C.J.; Line, R.F.; Rubenthaler, G.L. Pullman, Wash. : The Service. Extension Bulletin - Washington State University, Cooperative Extension Service. Nov 1983. Nov 1983. (1212). 6 p. ill. (NAL Call No.: 275.29 W27P).

0765

Cultural variation within *Typhula idahoensis* and *Typhula ishikariensis* and the species concept (Wheat pathogens, taxonomy, Interspecies hybrids).

Bruehl, G.W. Machtmes, R. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Sept 1980. v. 70 (9). p. 867-871. ill. 16 ref. (NAL Call No.: 464.8 P56).

0766

Cytological studies of early stages of powdery mildew in barley and wheat. VI. Antagonistic effects of calcium and lithium on the infection of coleoptiles of barley by Erysiphe graminis hordei.

Takamatsu, S., Ishizaki, H. Ottawa. Canadian journal of botany. Feb 15, 1979. v. 57 (4). p. 408-412. ill. 8 ref. (NAL Call No.: 470 C16C).

0767

Cytology and morphological development of basidia, dikaryons, and infective structures of Urocystis agropyri from wheat (Flag smut, Triticum aestivum).

Nelson, B.D. Jr. Duran, R. St. Paul : American Phytopathological Society. Phytopathology. Mar 1984. v. 74 (3). p. 299-304. ill. Includes references. (NAL Call No.: 464.8 P56).

0768

Decomposition of wheat straw infested by Cephalosporium gramineum (Soils).

Mathre, D.E. Johnston, R.H. Oxford, Pergamon Press. Soil biology and biochemistry. 1979. v. 11 (6). p. 577-580. ill. 17 ref. (NAL Call No.: S592.7.A1S6).

0769

Degradation of ¹⁴C (carbon isotope)-malathion in stored corn and wheat inoculated with Aspergillus glaucus.

Anderegg, B.N. JEENA. Madisen, L.J. College Park : Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 733-736. Includes references. (NAL Call No.: 421 J822).

0770

Density dependent sporulation of Erysiphe graminis f.sp.tritici.

PHYTAJ. Rouse, D.I. MacKenzie, D.R.; Nelson, R.R. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Oct 1984. v. 74 (10). p. 1176-1180. ill. Includes 16 references.

0771

Detecting wheat leaf rust resistance gene Lr 13 in seedlings (Puccinia recondia f. sp. tritici, influence of temperature).

Pretorius, Z.A. Wilcoxson, R.D.; Long, D.L.; Schafer, J.F. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1984. v. 68 (7). p. 585-586. Includes references. (NAL Call No.: 1.9 P69P).

0772

Detection of trichothecene mycotoxins.

Quantitation of deoxynivalenol by negative chemical ionization mass spectrometry (Corn, wheat, Fusarium).

Rothberg, J.M. ACSMC. Macdonald, J.L.; Swims, J.C. Washington : The Society. ACS Symposium Series - American Chemical Society. 1983. Based on a symposium sponsored by the Division of Agricultural and Food Chemistry at the 184th meeting of the American Chemical Society, Kansas City, Missouri, September 12-17, 1982. 1983. (234). p. 271-281. ill. Includes references. (NAL Call No.: QD1.A45).

0773

Determination of effective dose of Baytan as compared with Dithane Z-78 for control of leaf rust of wheat, 1982 (Puccinia recondita tritici, Triticum aestivum).

Singh, S.L. FNETD. Bedi, P.S. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 64-65. (NAL Call No.: 464.9 AM31R).

0774

Determination of optimum time for spray application of systemic fungicides for control of leaf rust of wheat, 1982 (Puccinia recondita tritici, Triticum aestivum).

Singh, S.L. FNETD. Bedi, P.S. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 65. (NAL Call No.: 464.9 AM31R).

0775

Developing wheats resistant to snow mold in Washington State (Triticum aestivum, Fusarium, Typhula).

Bruhl, G.W. St. Paul, American Phytopathological Society. Plant disease. Nov 1982. v. 66 (11). p. 1090-1095. ill. 20 ref. (NAL Call No.: 1.9 P69P).

0776

Disease and insect control through breeding: Resistance to viruses (Diseases of wheat, vectors, fungi).

Brown, C.M. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 166-170. (NAL Call No.: aSB191.W5N38 1982).

(PLANT DISEASES - FUNGAL)

0777

Disease control research on wheat (Fungicides). Rabb, J.L. LA. Horn, N.L.; Willis, L.D. Jr. Bossier City, The Station. Annual research report - Red River Valley Agricultural Experiment Station. Louisiana. Red River Valley Agricultural Experiment Station. 1979. 1979. p. 288-289. (NAL Call No.: 100 L9333).

0778

Distribution of wheat powdery mildew (*Erysiphe graminis* f. sp. *tritici*) incidence in field plots and relationship to disease severity. Rouse, D.I. MacKenzie, D.R.; Nelson, R.R.; Elliott, V.J. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Oct 1981. v. 71 (10). p. 1015-1020. 21 ref. (NAL Call No.: 464.8 P56).

0779

Durable resistance: definition of, genetic control, and attainment in plant breeding (*Puccinia striiformis*, wheat).

Johnson, R. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. June 1981. v. 71 (6). p. 567-568. 17 ref. (NAL Call No.: 464.8 P56).

0780

Dwarf bunt of wheat and its importance in international wheat trade (*Tilletia controversa*, history, epidemiology, United States, China).

Triome, E.J. St. Paul, American Phytopathological Society. *Plant disease*. Nov 1982. v. 66 (11). p. 1083-1088. ill., map. 16 ref. (NAL Call No.: 1.9 P69P).

0781

An ecophysiological approach to crop losses exemplified in the system wheat, leaf rust, and glume blotch.

Wal, A. F. van der. Wageningen Laboratorium voor Fytopathologie, Landbouwhogeschool 1975. 57 p. : ill. Bibliography: p. 29-33. (NAL Call No.: SB191.W5W3).

0782

Effect of barley yellow dwarf virus infection on the development of root rot caused by *Cochliobolus sativus* in *Avena sativa* and *Triticum durum* / by Donald Howard Scott. Scott, Donald Howard, 1934. 1968. Thesis (Ph.D)--University of Illinois, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. iv, 102 leaves : ill. ; 21 cm. Bibliography: leaves 83-87. (NAL Call No.: DISS 69-10,842).

0783

Effect of Baytan, a potential systemic seed treatment for control of rusts and powdery mildew, on stand and yield of spring wheat in eastern Washington, 1979 (Wheat (*Triticum aestivum* 'Fielder', 'Urgue', 'Twin', 'Lemhi'), leaf rust; *Puccinia recondita*, stripe rust; *Puccinia striiformis*, powdery mildew; *Erysiphe graminis*, phytotoxicity).

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0784

Effect of graded doses of gamma-irradiation on aflatoxin production by *Aspergillus parasiticus* in wheat.

Priyadarshini, E. Tulpule, P.G. Oxford, Pergamon Press. *Food and cosmetics toxicology*. Oct 1979. v. 17 (5). p. 505-507. ill. 18 ref. (NAL Call No.: 391.8 F73).

0785

Effect of guar and guar extracts on common root rot of winter wheat and spore germination of *Bipolaris sorokiniana*.

Johnson, D.A. Clark, L.E. Beltsville, Md., The Administration. *Plant disease reporter*. United States. Dept. of Agriculture. Science and Education Administration. Oct 1979. v. 63 (10). p. 811-815. ill. 13 ref. (NAL Call No.: 1.9 P69P).

0786

Effect of kernel development and wet periods on production of deoxynivalenol in wheat infected with *Gibberella zaeae*.

PHYTAJ. Hart, L.P. Pestka, J.J.; Liu, M.T. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. Dec 1984. v. 74 (12). p. 1415-1418. Includes 18 references.

0787

The effect of leaf pubescence on wheat leaf rust infection (*Puccinia recondita* f. sp. *tritici*).

McVey, M.A. Statler, G.D. Grand Forks, N.D. : The Academy. *Proceedings of the North Dakota Academy of Science*. Apr 1984. v. 38. p. 94. Includes 3 references. (NAL Call No.: 500 N813).

0788

Effect of light on uredospore germination, tropism of germ tubes, and uredosorus development of *Puccinia graminis tritici* and *P. recondita* on wheat / by Ho-Shii Chang.
 Chang, Ho-Shii. 1972. Thesis (Ph.D.)--University of Minnesota, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. v. 76 leaves ; 21 cm.
 Bibliography: leaves 73-76. (NAL Call No.: DISS 72-27,733).

0789

Effect of low temperature on the latent period of slow and fast rusting winter wheat genotypes (infected with *Puccinia recondita*).
 Johnson, D.A. St. Paul, Minn., American Phytopathological Society. Plant disease. Nov 1980. v. 64 (11). p. 1006-1008. 12 ref. (NAL Call No.: 1.9 P69P).

0790

Effect of mineral nutrition on take-all of wheat (caused by *Gaeumannomyces graminis* var. *tritici*).
 Reis, E.M. Cook, R.J.; McNeal, B.L. St. Paul, Minn., American Phytopathological Society. Phytopathology. Feb 1982. v. 72 (2). p. 224-229. Includes 20 ref. (NAL Call No.: 464.8 P56).

0791

Effect of mineral oil in controlling three foliar diseases of wheat / by Delfin B. Lapis.
 Lapis, Delfin B., 1931. 1970. Thesis (Ph.D.)--University of Minnesota, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. 92 leaves ; 21 cm.
 Bibliography: leaves 85-92. (NAL Call No.: DISS 71-18,767).

0792

Effect of seed treatment fungicides on germination, leaf rust and loose smut, 1980 (Wheat (*Triticum aestivum* 'Sonali'), leaf rust; *Puccinia recondita*, loose smut; *Ustilago tritici*, seed mycoflora; species of *Alternaria*, *Aspergillus*, *Curvularia*, *Helminthosporium*, etc.).
 Khaskheli, A.M. Jagirdar, H.A.; Pathan, I.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 173. (NAL Call No.: 464.9 AM31R).

0793

Effect of seed treatment on control of speckled leaf blotch, 1982 (*Septoria tritici* on wheat, *Triticum aestivum*).
 Ballinger, D.J.FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 36. (NAL Call No.: 464.9 AM31R).

0794

Effect of seed treatment on seedling emergence and bunt control, 1982 (*Tilletia caries*, *Tilletia foetida*, *Triticum aestivum*, wheat).
 Ballinger, D.J.FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 35-36. (NAL Call No.: 464.9 AM31R).

0795

Effect of seed treatment on wheat bunt, 1979 (Wheat (*Triticum aestivum* 'Olympic')), bunt; *Tilletia caries* and *Tilletia foetida*).
 Ballinger, D.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 198-199. (NAL Call No.: 464.9 AM31R).

0796

Effect of seed treatment on wheat seedling emergence, 1979 (Wheat (*Triticum aestivum* 'Arthur 71')), seed decay and seedling blight).
 Jones, J.P. Dolezal, W.E.; Collins, F.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 206-207. (NAL Call No.: 464.9 AM31R).

0797

Effect of seed treatments on plant establishment and bunt control, 1980 (Wheat (*Triticum aestivum* 'Olympic')), bunt; *Tilletia caries* and *Tilletia foetida*).
 Ballinger, D.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 167. (NAL Call No.: 464.9 AM31R).

0798

Effect of seeding date of winter wheat on incidence, severity, and yield loss caused by *Cephalosporium stripe* in Kansas (*Cephalosporium gramineum*, effects of delayed planting).
 Raymond, P.J. Bockus, W.W. St. Paul, Minn. : American Phytopathological Society. Plant disease. Aug 1984. v. 68 (8). p. 665-667. illl. Includes 18 references. (NAL Call No.: 1.9 P69P).

(PLANT DISEASES - FUNGAL)

0799

Effect of soil solarization and fungicide soil drenches on crater disease of wheat (tarping with clear polyethylene, fumigation with methyl bromide, 12 fungicidal drenches, South Africa). Smith, E.M. Wehner, F.C.; Kotze, J.M. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1984. v. 68 (7). p. 582-584. Includes references. (NAL Call No.: 1.9 P69P).

0800

Effect of temperature and host: parasite combination on the latent period of *Puccinia recondita* in seedling wheat plants. Eversmeyer, M.G. AR-NC. Kramer, C.L.; Browder, L.E. St. Paul, Minn., American Phytopathological Society. Phytopathology. Oct 1980. v. 70 (10). p. 938-941. ill. 12 ref. (NAL Call No.: 464.8 P56).

0801

Effect of water activity and temperature on mycotoxin production by *Alternaria alternata* in culture and on wheat grain. Magan, N. Cayley, G.R.; Lacey, J. Washington, D.C. : American Society for Microbiology. Applied and environmental microbiology. May 1984. v. 47 (5). p. 1113-1117. Includes references. (NAL Call No.: 448.3 AP5).

0802

Effect of water potential on reproduction and spore germination by *Fusarium roseum* 'Graminearum,' 'Culmorum', and 'Avenaceum' (Soilborne pathogens, wheat). Sung, J.M. Cook, R.J. Laramie, The Station. Science monograph - University of Wyoming, Agricultural Experiment Station. May 1981. v. 71 (5). p. 499-504. 19 ref. (NAL Call No.: S131.E2).

0803

Effectiveness of chemical seed treatments in controlling common bunt, 1980 (Wheat (*Triticum aestivum* 'Butte')), common bunt; *Tilletia foetida*). Johnston, R.H. Metz, S.G.; Mathre, D.E. (s.l.). The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 172-173. (NAL Call No.: 464.9 AM31R).

0804

Effectiveness of different rates of bayletan as compared with Dithane Z-78 for control of leaf rust of wheat, 1982 (*Puccinia recondita tritici* on *Triticum aestivum*).

Singh, S.L. FNEDT. Bedi, P.S. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 65-66. (NAL Call No.: 464.9 AM31R).

0805

Effectiveness of experimental seed treatments in controlling common bunt of spring wheat, 1979 (Wheat (spring) (*Triticum aestivum* 'Wared'), common bunt; *Tilletia foetida*). Johnston, R.H. Mathre, D.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 205-206. (NAL Call No.: 464.9 AM31R).

0806

Effects of "dirting" on strawbreaker foot rot of winter wheat (*Pseudocercospora herpotrichoides*, soil or volcanic ash placed around the base of winter wheat, Washington). Bruehl, G.W. Machmes, R. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 868-870. Includes 2 references. (NAL Call No.: 1.9 P69P).

0807

Effects of fall infection by *Gaeumannomyces graminis* var. *tritici* and triadimenol seed treatment on severity of take-all in winter wheat (*Triticum aestivum*). Bockus, W.W. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Apr 1983. v. 73 (4). p. 540-543. Includes references. (NAL Call No.: 464.8 P56).

0808

Effects of fertilizers on slow rusting in wheat (*Puccinia graminis tritici*, *Puccinia recondita tritici*). Wilcoxson, R.D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Sept 1980. v. 70 (9). p. 930-932. 8 ref. (NAL Call No.: 464.8 P56).

0809

Effects of foliar applied materials on wheat yield and disease, 1980 (Wheat (*Triticum aestivum* 'Rosen'), *Septoria* leaf blotch; *Septoria* spp., *Septoria tritici*, *Septoria nodorum*, powdery mildew; *Erysiphe graminis* f.sp. *tritici*, leaf rust; *Puccinia recondita*, scab; *Fusarium graminearum* fl.sp. *cerealis*). Wright, F.E. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 125-126. (NAL Call No.: 464.9 AM31R).

0810

Effects of free moisture, head development, and embryo accessibility on infection of wheat by *Ustilago tritici* (Loose smut in *Triticum aestivum*). Loria, R.PHYTA. Wiese, M.V.; Jones, A.L. St. Paul : American Phytopathological Society. Phytopathology. Oct 1982. v. 72 (10). p. 1270-1272. 9 ref. (NAL Call No.: 464.8 P56).

0811

Effects of fungicidal seed treatments on seedling emergence and grain yield of wheat, 1980 (Wheat (*Triticum aestivum* 'Coker 747')), seedling disease fungi; *Pythium* sp., *Fusarium* sp.). Reed, H.E. Chambers, A.Y.; McCutchen, T.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 176-177. (NAL Call No.: 464.9 AM31R).

0812

Effects of phosphorus and potassium fertilization on *Septoria* (*nodorum*) glume blotch of wheat. Cunfer, B.M. Touchton, J.T.; Johnson, J.W. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1980. v. 70 (12). p. 1196-1199. ill. (NAL Call No.: 464.8 P56).

0813

Effects of powdery mildew (*Erysiphe graminis* *tritici*) on yield and quality of isogenic lines of 'Chancellor' wheat (Flour protein content). Johnson, J.W. Baenziger, P.S. Madison, Crop Science Society of America. Crop science. May/June 1979. v. 19 (3). p. 349-352. ill. 17 ref. (NAL Call No.: 64.8 C883).

0814

Effects of *Pythium arrhenomanes* infection and root-tip amputation on wheat seedling development. Singleton, L.L. Ziv, O. St. Paul, Minn., American Phytopathological Society. Phytopathology. Mar 1981. v. 71 (3). p. 316-319. ill. 6 ref. (NAL Call No.: 464.8 P56).

0815

The effects of *Septoria nodorum* (causal organism of glume blotch) and *Xanthomonas translucens* f. sp. *undulosa* (incitant of black chaff) on photosynthesis and transpiration of wheat flag leaves.

Jones, J.B. Roane, C.W.; Wolf, D.D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Nov 1981. v. 71 (11). p. 1173-1177. 20 ref. (NAL Call No.: 464.8 P56).

0816

Effects of soil fumigation and foliar fungicides on grain yield of hard red winter wheat, 1980 (Wheat (*Triticum aestivum*), powdery mildew; *Erysiphe graminis* f.sp. *tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*).

Frank, J.A. Cole, H. Jr.; Marshall, H.G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 111-112. (NAL Call No.: 464.9 AM31R).

0817

Effects of soil fumigation and foliar fungicides on powdery mildew, *Septoria* blight, and grain yield of wheat, 1980 (Wheat (*Triticum aestivum*), powdery mildew; *Erysiphe graminis* f.sp. *tritici*, *Septoria* blight; *Septoria nodorum*, *Septoria tritici*).

Frank, J.A. Cole, H. Jr.; Marshall, H.G. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 112. (NAL Call No.: 464.9 AM31R).

0818

Effects of sulfur dioxide on southern corn leaf blight (caused by *Helminthosporium maydis*) of maize and stem rust (*Puccinia graminis*) of wheat.

Laurence, J.A. Weinstein, L.H. Beltsville, Md., The Administration. Plant disease reporter. United States. Dept. of Agriculture. Science and Education Administration. Nov 1979. v. 63 (11). p. 975-978. ill. 8 ref. (NAL Call No.: 1.9 P69P).

(PLANT DISEASES - FUNGAL)

0819

Effects of triadimefon on the ultrastructure of rust fungi infecting leaves of wheat and broad bean (*Vicia faba*) (*Uromyces vicia-fabae*, *Puccinia recondita*).
Pring, R.J. P.C.P.B. New York : Academic Press.

Pesticide biochemistry and physiology. Feb 1984. v. 21 (1). p. 127-137. ill. Includes references. (NAL Call No.: SB951.P49).

0820

Efficacy of fungicides for the control of wheat foliar diseases, 1981 (Wheat (*Triticum aestivum* L.), powdery mildew; *Erysiphe graminis* f. sp. *tritici*, glume blotch; *Septoria* spp.).

Hovemale, C.H. Trevathan, L.; Reasons, D.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 117. (NAL Call No.: 464.9 AM31R).

0821

Electron microscopy and plant sciences--emphasis upon fungal spores (*Tilletia caries*, *Tilletia controversa*, *Tilletia foetida*, wheat smut fungus).

Hess, W.M. Baton Rouge, Claitor's Publishing Division. Proceedings - Annual meeting. Electron Microscopy Society of America. 1979. 1979. (37th). p. 168-171. ill. 5 ref. (NAL Call No.: QH201.E4).

0822

Electron microscopy of susceptible and resistant near-isogenic (sr6/Sr6) lines of wheat infected by *Puccinia graminis tritici*. I. The host-pathogen interface in the compatible (sr6/P6) interaction.

Harder, D.E. Rohringer, R. Ottawa. Canadian journal of botany. Dec 1, 1978. v. 56 (23). p. 2955-2966. ill. 25 ref. (NAL Call No.: 470 C16C).

0823

Electron microscopy of susceptible and resistant near-isogenic (sr6/Sr6) lines of wheat infected by *Puccinia graminis tritici*. III. Ultrastructure of incompatible interactions.

Harder, D.E. Samborski, D.J. Ottawa, National Research Council of Canada. Canadian journal of botany. Journal canadien de botanique. Dec 1, 1979. v. 57 (23). p. 2626-2634. ill. 16 ref. (NAL Call No.: 470 C16C).

0824

Electron microscopy of susceptible and resistant near-isogenic (sr6/Sr6) lines of wheat infected by *Puccinia graminis tritici* (stem rust). II. Expression of incompatibility in mesophyll and epidermal cells and the effect of temperature on host-parasite interactions in these cells.

Harder, D.E. Rohringer, R. Ottawa, National Research Council of Canada. Canadian journal of botany. Journal canadien de botanique. Dec 1, 1979. v. 57 (23). p. 2617-2625. ill. 8 ref. (NAL Call No.: 470 C16C).

0825

Elevated pH and associated reduced trace-nutrient availability as factors contributing to take-all of wheat upon soil liming (*Gaeumannomyces graminis* var. *tritici*, *Triticum aestivum*).

Reis, E.M. PHYTA. Cook, R.J.; McNeal, B.L. St. Paul : American Phytopathological Society. Phytopathology. Mar 1983. v. 73 (3). p. 411-413. Includes references. (NAL Call No.: 464.8 P56).

0826

Environmental and host effects on colony development on *Puccinia recondita* f. sp. *tritici* (*Triticum aestivum*, wheat, colony size, uredinium size, spore production).

Tomerlin, J.R. Eversmeyer, M.G.; Kramer, C.L.; Browder, L.E. St. Paul : American Phytopathological Society. Phytopathology. Feb 1984. v. 74 (2). p. 225-229. Includes references. (NAL Call No.: 464.8 P56).

0827

Environmental effects on inoculum quality of dormant rust uredospores (of *Puccinia graminis tritici* and *Puccinia recondita tritici*, the causative agents of stem rust and leaf rust of wheat).

Wiese, M.V. Ravenscroft, A.V. St. Paul, Minn., American Phytopathological Society. Phytopathology. Oct 1979. v. 69 (10). p. 1106-1108. ill. 17 ref. (NAL Call No.: 464.8 P56).

0828

Estimated losses (of wheat, oats, barley, and rye) from rust in 1978.

Long, D.L. (comp.). Hyattsville, Md., Animal and Plant Health Inspection Service, U.S. Dept. of Agriculture. Cooperative plant pest report United States Animal and Plant Health Inspection Service. Plant Protection and Quarantine Programs. Apr 20, 1979. v. 4 (13). p. 194-198. ill. (NAL Call No.: aSB823.U53).

(PLANT DISEASES - FUNGAL)

0829

Etiology of *Rhizoctonia cerealis* in sharp eyespot of wheat (*Triticum aestivum*, pathogenicity of isolates obtained from lesions).

Lipps, P.E. PHYTA. Herr, L.J. St. Paul : American Phytopathological Society. *Phytopathology*. Dec 1982. v. 72 (12). p. 1574-1577. ill. 23 ref. (NAL Call No.: 464.8 P56).

0830

Evaluation of Bayleton for control of stripe rust, 1980 (Wheat (*Triticum aestivum*), stripe rust; *Puccinia striiformis*).

Line, R.F. Waldher, J. (s.l.). The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 116. (NAL Call No.: 464.9 AM31R).

0831

Evaluation of chemical seed treatments on seedling stand and yield of winter wheat, 1982 (Decay and blight, *Pythium* and *Fusarium* spp., *Triticum aestivum*).

Reed, H.E. FNEDT. Chambers, A.Y.; McCutchen, T.C. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 43. (NAL Call No.: 464.9 AM31R).

0832

Evaluation of foliar-applied fungicides on wheat (Yield response).

Sciumbato, G.L. Edwards, N.C. Mississippi State : The Station. MAFES research highlights - Mississippi Agricultural & Forestry Experiment Station. Dec 1982. v. 45 (12). p. 7-8. (NAL Call No.: 100 M69MI).

0833

Evaluation of foliar applied fungicides on winter wheat cultivar Rosen, 1982 (Mildews, rusts, scab and *Septoria* spp. on *Triticum aestivum*).

Wright, F.E. FNEDT. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 69. (NAL Call No.: 464.9 AM31R).

0834

Evaluation of foliar fungicides for control of leaf and head diseases of wheat, 1979 (Wheat (*Triticum aestivum* 'Sullivan'), powdery mildew; *Erysiphe graminis* f. sp. *tritici*, leaf blotch; *Puccinia recondita* f. sp. *tritici*, head scab; *Fusarium* spp.).

Stuckey, R.E. Vian, W.E. (s.l.), The Society.

Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 129-130. (NAL Call No.: 464.9 AM31R).

0835

Evaluation of foliar fungicides for control of leaf rust and *Septoria* in wheat, 1982 (*Puccinia recondita* f. sp. *tritici*, leaf and glume blotch, *Triticum aestivum*).

Sciumbato, G.L. FNEDT. Johnson, J. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 63. (NAL Call No.: 464.9 AM31R).

0836

Evaluation of foliar fungicides for leaf rust, *Septoria* leaf spot, glume blotch, and yield on 'Abe' wheat, 1981 (Wheat (*Triticum aestivum* 'Abe'), leaf rust; *Puccinia recondita*, *Septoria* leaf spot; *Septoria tritica*, glume blotch; *Septoria nodorum*).

Stuckey, R.E. McCarter-Zorner, N.J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 124. (NAL Call No.: 464.9 AM31R).

0837

Evaluation of foliar fungicides for powdery mildew and glume blotch on 'Beau' wheat, 1980 (Wheat (*Triticum aestivum* 'Beau')), powdery mildew; *Erysiphe graminis* f. sp. *tritici*, glume blotch; *Septoria nodorum*).

Stuckey, R.E. Shafer, M. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 120. (NAL Call No.: 464.9 AM31R).

0838

Evaluation of foliar fungicides on soft red winter wheat, 1982 (Powdery mildew, *Erysiphe graminis* sp. *tritici*, *Triticum aestivum*). Stromberg, E.L. FNEDT. Babineau, D.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 66. (NAL Call No.: 464.9 AM31R).

0839

Evaluation of foliar fungicides on two wheat cultivars, 1982 (*Erysiphe graminis*, *Triticum aestivum*, comparison of Tyler and Blue Boy varieties).

Phipps, P.M. FNEDT. Brann, D.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 61. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0840

Evaluation of foliar fungicides on wheat, 1980 (Wheat (*Triticum aestivum* 'Arthur' and 'Coker 747'), glume blotch; *Septoria nodorum*, leaf rust; *Puccinia recondita*).
Reed, H.E. Chambers, A.Y.; McCutchen, T.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 119. (NAL Call No.: 464.9 AM31R).

0841

Evaluation of foliar fungicides on wheat, 1981 (Wheat (*Triticum aestivum* 'McNair 1003'), glume blotch; *Septoria nodorum*, leaf rust; *Puccinia recondita*).
Reed, H.E. Chambers, A.Y.; McCutchen, T.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 123. (NAL Call No.: 464.9 AM31R).

0842

Evaluation of foliar fungicides on wheat, 1981 (Wheat (*Triticum aestivum* 'Roland'), powdery mildew; *Erysiphe graminis* tritici, leaf blotch; *Septoria nodorum*, *Septoria nodorum*, *Septoria tritici*).
Cole, H. Jr. Frank, J.A.; Thomas, G.; Ayers, J.E.; Jordan, L.; Watson, G.R. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 115. (NAL Call No.: 464.9 AM31R).

0843

Evaluation of fungicidal seed treatment for suppression of take-all of wheat, 1982 (*Gaeumannomyces graminis* var. *tritici* on *Triticum aestivum*).
Halsey, M.E.FNETD. Powelson, R.L. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 37. (NAL Call No.: 464.9 AM31R).

0844

Evaluation of fungicide seed treatment for control of scab on soft red winter wheat, 1981 (Wheat (*Triticum aestivum* 'Rosen'), scab; *Gibberella zeae*).
Jones, J.P. Collins, F.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 183. (NAL Call No.: 464.9 AM31R).

0845

Evaluation of fungicide seed treatment in control of seed-borne and soil-borne diseases of winter wheat, 1981 (Wheat (winter) (*Triticum aestivum* 'Arthur 71'), covered smut or bunt; *Tilletia foetida*, loose smut; *Ustilago tritici*, scab; *Gibberella zeae*, glume blotch; *Septoria nodorum*).
Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 184. (NAL Call No.: 464.9 AM31R).

0846

Evaluation of fungicide seed treatment in control of seed-borne diseases of wheat, 1980 (Wheat (winter) (*Triticum aestivum* 'Arthur 71'), covered smut or bunt; *Tilletia foetida*, loose smut; *Ustilago tritici*, scab; *Gibberella zeae*, glume blotch; *Septoria nodorum*).
Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 174-175. (NAL Call No.: 464.9 AM31R).

0847

Evaluation of fungicide seed treatment on bunt and other head diseases of wheat, 1979 (Wheat (Winter) (*Triticum aestivum* 'Abe', 'Caddo'), covered smut or bunt; *Tilletia foetida*, loose smut; *Ustilago tritici*, scab; *Gibberella zeae*, glume blotch; *Septoria nodorum*).
Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 210. (NAL Call No.: 464.9 AM31R).

0848

Evaluation of fungicide seed treatments for control of loose smut and seedling emergence of wheat, 1982 (*Ustilago tritici*, decay and blight, *Alternaria*, *Fusarium*, *Helminthosporium* and *Pythium* spp., *Triticum aestivum*).
Williams, E. Jr. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 44-45. (NAL Call No.: 464.9 AM31R).

0849

Evaluation of fungicide seed treatments for loose smut control and seedling emergence of wheat, 1980 (Wheat (*Triticum aestivum* 'Caddo')), loose smut; *Ustilago tritici*, seed decay and seedling blight; *Alternaria*, *Fusarium*, *Helminthosporium* and *Pythium* spp.).
Williams, E. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 178. (NAL Call No.: 464.9 AM31R).

0850

Evaluation of fungicide seed treatments for loose smut control and seedling emergence of wheat, 1981 (Wheat (*Triticum aestivum* ('Caddo')), loose smut; *Ustilago tritici*, seed decay and seedling blight; *Alternaria*, *Fusarium*, *Helminthosporium* and *Pythium* spp.). Williams, E. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 187. (NAL Call No.: 464.9 AM31R).

0851

Evaluation of fungicides for control of foliar diseases of soft red winter wheat, 1982 (Septoria tritici, Septoria nodorum, Puccinia recondita, Puccinia graminis f. sp. tritici, Drechslera sorokinianum, *Triticum aestivum*). Palm, E.W. FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 60-61. (NAL Call No.: 464.9 AM31R).

0852

Evaluation of fungicides for control of foliar diseases of wheat, 1979 (Wheat (*Triticum aestivum* 'Arthur 71')), Septoria leaf blotch; Septoria tritici, Septoria glume blotch; Septoria nodorum, leaf rust; Puccinia recondita, stem rust; Puccinia graminis tritici, spot blotch; *Helminthosporium sativum*). Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 125-126. (NAL Call No.: 464.9 AM31R).

0853

Evaluation of fungicides for control of foliar diseases of wheat, 1980 (Wheat (*Triticum aestivum* 'Arthur 71')), Septoria leaf blotch; Septoria tritici, Septoria glume blotch; Septoria nodorum, leaf rust; Puccinia recondita, stem rust; Puccinia graminis tritici, spot blotch; *Helminthosporium sativum*). Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 116-117. (NAL Call No.: 464.9 AM31R).

0854

Evaluation of fungicides for control of foliar diseases of wheat, 1980 (Wheat (*Triticum aestivum* 'Coker 747')), glume blotch; Septoria nodorum, leaf rust; Puccinia recondita). Reed, H.E. Chambers, A.Y. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 118-119. (NAL Call No.: 464.9 AM31R).

0855

Evaluation of fungicides for control of foliar diseases of wheat, 1982 (Puccinia recondita f. sp. tritici, Septoria sp., *Triticum aestivum*). Edwards, N.C. FNETD. Sciumbato, G.L. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 54-55. (NAL Call No.: 464.9 AM31R).

0856

Evaluation of fungicides for control of foliar diseases of wheat, 1982 (Septoria nodorum, Septoria sp., Puccinia recondita, *Triticum aestivum*). Reed, H.E. FNETD. Chambers, A.Y.; McCutchen, T.C. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 63. (NAL Call No.: 464.9 AM31R).

0857

Evaluation of fungicides for control of foliar diseases of winter wheat, 1981 (Wheat (*Triticum aestivum* 'Arthur 71')), Septoria leaf blotch; Septoria tritici, Septoria glume blotch; Septoria nodorum, leaf rust; Puccinia recondita, stem rust; Puccinia graminis f.sp. tritici, spot blotch; Drechslera sorokinianum). Palm, E.W. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 120-121. (NAL Call No.: 464.9 AM31R).

0858

Evaluation of fungicides for leaf rust and tan spot control in winter wheat, 1981 (Wheat (*Triticum aestivum* 'Scout 66')), leaf rust; Puccinia recondita, tan spot; Pyrenophora trichostoma). Watkins, J.E. Wiebe, W.L.; Wysong, D.S.; Doupink, B. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 125. (NAL Call No.: 464.9 AM31R).

0859

Evaluation of fungicides for leaf rust, Septoria leaf spot and yield on wheat, 1982 (Puccinia recondita, Septoria tritici, *Triticum aestivum*). Stuckey, R.E. FNETD. Clinton, W. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 67. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0860

Evaluation of fungicides for the control of leaf rust of wheat, 1982 (Puccinia recondita tritici on Triticum aestivum).

Singh, S.L.FNETD. Bedi, P.S. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 66. (NAL Call No.: 464.9 AM31R).

Society. 1982. v. 37. p. 185. (NAL Call No.: 464.9 AM31R).

0861

Evaluation of (germ plasm) resistance to Septoria nodorum (glume blotch) in wheat.

Rufy, R.C. Hebert, T.T.; Murphy, C.F. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1981. v. 65 (5). p. 406-409. 22 ref. (NAL Call No.: 1.9 P69P).

0866

Evaluation of systemic fungicides for control of rusts and powdery mildew of wheat in the Pacific Northwest (Wheat (Triticum aestivum), stripe rust; Puccinia striiformis, leaf rust; Puccinia recondita, powdery mildew; Erysiphe graminis).

Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 124-125. (NAL Call No.: 464.9 AM31R).

0862

Evaluation of seed treatment for the control of take-all of wheat, 1979 (Wheat (Triticum aestivum 'Eagle'), seedling blight, root rot, take-all; Gaeumannomyces graminis var. tritici).

Lengkeek, V.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 207. (NAL Call No.: 464.9 AM31R).

0867

Evaluation of systemic fungicides for control of stripe rust, 1980 (Wheat (Triticum aestivum 'Yamhil', 'Nugaines'), stripe rust; Puccinia striiformis).

Line, R.F. Waldher, J. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 228. (NAL Call No.: 464.9 AM31R).

0863

Evaluation of seed treatment for the control of wheat soil-borne mosaic of wheat, 1979 (Wheat (Triticum aestivum 'Eagle' and 'Newton'), Polymyxia graminis, wheat soil-borne mosaic virus (WSBMV)).

Lengkeek, V.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 208. (NAL Call No.: 464.9 AM31R).

0868

Evaluation of the fungicide DPX-770-2 on wheat, 1979 (Wheat (Triticum aestivum), foliar disease).

Jones, J.P. Dolezal, W.E.; Collins, F.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 122. (NAL Call No.: 464.9 AM31R).

0864

Evaluation of seed treatments for control of seedborne common bunt by winter wheat, 1982 (Tilletia foetida, Triticum aestivum).

Johnston, R.H.FNETD. Mathre, D.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 39-40. (NAL Call No.: 464.9 AM31R).

0869

Evidence for Pythium as a pathogen of direct-drilled wheat in the Pacific Northwest. Cook, R.J. Sitton, J.W. St. Paul, Minn., American Phytopathological Society. Plant disease. Jan 1980. v. 64 (1). p. 102-103. ill. 4 ref. (NAL Call No.: 1.9 P69P).

0865

Evaluation of seed treatments on seedling emergence and grain yield of wheat, 1981 (Wheat (Triticum aestivum 'Coker 747'), Pythium spp., Fusarium spp.).

Reed, H.E. Chambers, A.Y.; McCutchen, T.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological

0870

Experiments toward the control of the take-all disease of wheat and the phymatotrichum root rot of cotton by Frances E. Clark.

Clark, F. E. (Francis Eugene). Washington, D.C. U.S. Dept. of Agriculture 1942. 27 p. : ill. - Bibliography: p. 26-27. (NAL Call No.: Fiche S-69 no.835).

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0871

Factors affecting infection of wheat seedlings by *Septoria nodorum* (Glume blotch, *Triticum aestivum*).
Babadoost, M. Hebert, T.T. St. Paul, Minn. : American Phytopathological Society.

Phytopathology. May 1984. v. 74 (5). p. 592-595. Includes references. (NAL Call No.: 464.8 P56).

38. p. 58-59. (NAL Call No.: 464.9 AM31R).

0872

Factors in loss of pathogenicity in *Gaeumannomyces graminis* var. *tritici* (Take-all of wheat, *Triticum aestivum*).
Naiki, T. PHYTAJ. Cook, R.J. St. Paul : American Phytopathological Society. Phytopathology. Dec 1983. v. 73 (12). p. 1652-1656. Includes references. (NAL Call No.: 464.8 P56).

0877

Foliar fungicide evaluations on wheat, 1979 (Wheat (*Triticum aestivum* 'Coker 68-19'), leaf rust; *Puccinia recondita*, leaf and glume blotch; *Septoria spp.*).
Shakes, F.M. Barnett, R.D. (s.l.), The Society.

Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 129. (NAL Call No.: 464.9 AM31R).

0873

Factors influencing invasion of stored wheat seed by *Aspergillus* spp. and the effects of such invasion on germination and amount of germ damage / by George C. Papavizas.
Papavizas, George C. (George Constantinos), 1922. 1957. Thesis (Ph.D.)--University of Minnesota, 1957. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. 88 leaves : ill. ; 22 cm. Bibliography: leaves 85-88. (NAL Call No.: DISS 57-21,255).

0878

Foliar sprays for control of spot blotch on wheat, 1981 (*Cochliobolus sativus*, *Triticum aestivum*).
Luz, W.C. da.FNETD. (s.l.) : The Society.

Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 54. (NAL Call No.: 464.9 AM31R).

0874

Fertilizers suppress wheat disease (Take-all root rot, *Gaeumannomyces graminis tritici*, soil-borne fungal pathogens).
Christensen, N.W. Taylor, R.G. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Spring 1982. v. 66. p. 34-36. (NAL Call No.: 6 B46).

0879

Foliar treatments for control of glume blotch of wheat, 1979 (Wheat (*Triticum aestivum* 'Arthur'), glume blotch; *Septoria nodorum*).
Reed, H.E. Chambers, A.Y. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 127. (NAL Call No.: 464.9 AM31R).

0875

Field crop disease management.
Ellett, C. Wayne. 1981. This discusses diseases and management practices for their control of corn, soybeans, wheat, oats, and alfalfa. Document available from: Ext. Office of Information, Ohio State University, 2120 Fyffe Road, Columbus, OH 43210. 4 p. (NAL Call No.: Not available at NAL.). (NAL Call No.: Bul. 631).

0880

Fungal populations in U.S. farm-stored grain and their relationship to moisture, storage time, regions, and insect infestation (*Aspergillus glaucus*, oats, wheat, maize).
Sauer, D.B. Storey, C.L.; Walker, D.E. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1984. v. 74 (9). p. 1050-1053. maps. Includes 13 references. (NAL Call No.: 464.8 P56).

0876

Foliar and seed applied fungicides for control of wheat diseases, 1982 (*Erysiphe graminis*, *Puccinia recondita*, *Triticum aestivum*).
Lipps, P.E.FNETD. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v.

0881

Fungicidal protectants to improve winter wheat stands, 1980 (Wheat (*Triticum aestivum* 'Arthur 71'), seed decay and seedling blights; *Fusarium*, *Pythium*, *Rhizoctonia*, et al).
Anzalone, L. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 165-166. (NAL Call No.: 464.9 AM31R).

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0882

Fungicide control of leaf and stem rust of wheat, 1980 (Wheat (*Triticum aestivum* 'Pake 70'), leaf rust; *Puccinia recondita*, stem rust; *Puccinia graminis* f.sp. *tritici*). Khaskheli, A.M. Khanzada, A.L.; Bajeer, M.U.; Jagirdar, H.A.; Pathan, I.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 118. (NAL Call No.: 464.9 AM31R).

0883

Fungicide control of leaf rust and leafspots of hard red spring wheat, 1982 (Puccinia recondita f. sp. *tritici*, *Pyrenophora trichostoma*, *Septoria* sp., *Triticum aestivum*). Irwin, R.D. FNEDT. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 56. (NAL Call No.: 464.9 AM31R).

0884

Fungicide control of leaf rust and tan spot of winter wheat, 1980 (Wheat (*Triticum aestivum* 'Scout 66'), leaf rust; *Puccinia recondita*, tan spot; *Pyrenophora trichostoma*). Watkins, J.E. Dounnik, B.L. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 120. (NAL Call No.: 464.9 AM31R).

0885

Fungicide control of powdery mildew of wheat, 1982 (*Erysiphe graminis* f. sp. *tritici*, *Triticum aestivum*). Krausz, J.P. FNEDT. Thilsted, W.E. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 57. (NAL Call No.: 464.9 AM31R).

0886

Fungicide evaluation for control of wheat Cercospora foot rot, 1979 (Winter wheat (*Triticum aestivum* v. *Nugaines*), foot rot; Cercospora herpotrichoides). Powelson, R.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 126-127. (NAL Call No.: 464.9 AM31R).

0887

Fungicide evaluation for control of wheat Cercospora foot rot, 1980 (Wheat (winter) (*Triticum aestivum*), foot rot; Cercospora herpotrichoides). Powelson, R.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 118. (NAL Call No.: 464.9 AM31R).

0888

Fungicide evaluation for control of wheat Cercospora foot rot, 1981 (Wheat (*Triticum aestivum* 'Nugaines', 'Stephens'), foot rot; Cercospora herpotrichoides). Powelson, R.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 121. (NAL Call No.: 464.9 AM31R).

0889

Fungicide evaluation for control of wheat Septoria blotch's and rusts, 1981 (Wheat (*Triticum aestivum* 'Stephens', 'Yamhill', 'Omar'), stripe rust; *Puccinia striiformis*, leaf rust; *Puccinia recondita* f.sp. *tritici*, *Septoria* blotch; *Septoria tritici* and *Septoria nodorum*). Powelson, R.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 122. (NAL Call No.: 464.9 AM31R).

0890

Fungicide evaluation for wheat leaf rust control, 1980 (Wheat (*Triticum aestivum* 'Arthur 71'), leaf rust; *Puccinia recondita*). Anzalone, L. Jr. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 108-109. (NAL Call No.: 464.9 AM31R).

0891

Fungicide evaluation for wheat rusts, 1979 (Wheat (*Triticum aestivum* 'Purdue 5481C1' and 'Thatcher'), stem rust; *Puccinia graminis* f. sp. *tritici*, leaf rust; *Puccinia recondita*). Rowell, J.B. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 127-128. (NAL Call No.: 464.9 AM31R).

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0892

Fungicide evaluation on wheat, 1979 (Wheat (*Triticum aestivum*), foliar diseases). Jones, J.P. Dolezal, W.E.; Collins, F.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 122-123. (NAL Call No.: 464.9 AM31R).

0893

Fungicide evaluation on wheat, 1981 (Wheat (*Triticum aestivum* 'Abe', 'Doublecrop', 'Rosen', 'Coker 68-15', 'Coker 762', 'McNair 1003'), leaf rust; *Puccinia recondita*, powdery mildew; *Erysiphe graminis*, Septoria blotch; *Septoria tritici*). Jones, J.P. Bassi, A. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1982. v. 37. p. 117. (NAL Call No.: 464.9 AM31R).

0894

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0895

Fungicides for control of powdery mildew of wheat, 1982 (*Erysiphe graminis* f. sp. *tritici*, *Triticum aestivum*). Kingsland, G.FNETD. Smith, F.H.; Powell, R.C.; Graham, W.D. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 56. (NAL Call No.: 464.9 AM31R).

0896

Fungitoxicity of smoke (from burning wheat or barley straw, *Rhizoctonia solani*, *Pythium ultimum*, *Erysiphe graminis hordei*, *Colletotrichum trifolii*, phenolic compounds, tannase). Zagory, D. Parmeter, J.R. Jr. St. Paul, Minn. : American Phytopathological Society. *Phytopathology*. Sept 1984. v. 74 (9). p. 1027-1031. ill. Includes 20 references. (NAL Call No.: 464.8 P56).

0897

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Society. *Phytopathology*. Dec 1981. v. 71 (12). p. 1269-1272. Includes 15 ref. (NAL Call No.: 464.8 P56).

0898

Fusarium (roseum) foot rot of wheat and its control in the Pacific Northwest. Cook, R.J. St. Paul, Minn., American Phytopathological Society. *Plant disease*. Dec 1980. v. 64 (12). p. 1061-1066. ill. 14 ref. (NAL Call No.: 1.9 P69P).

0899

A gene for resistance to *Puccinia graminis* f. sp. *tritici* that is present in wheat cultivar H-44 but not in cultivar Hope. Green, G.J. Dyck, P.L. St. Paul, American Phytopathological Society. *Phytopathology*. June 1979. v. 69 (6). p. 672-675. ill. 9 ref. (NAL Call No.: 464.8 P56).

0900

Genetic control of disease expression in stem rust (*Puccinia graminis*) of wheat. Loegering, W.Q. Sears, E.R. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Apr 1981. v. 71 (4). p. 425-428. ill. 8 ref. (NAL Call No.: 464.8 P56).

0901

Genetic control of primary haustorial development of *Erysiphe graminis* on wheat. Haywood, M.J. Ellingboe, A.H. St. Paul, American Phytopathological Society. *Phytopathology*. Jan 1979. v. 69 (1). p. 48-53. ill. 9 ref. (NAL Call No.: 464.8 P56).

0902

Genetic control of primary interactions during infection of wheat by *Erysiphe graminis* f. sp. *tritici*. Slesinski, Ronald Stephen. Ann Arbor, Mich. University Microfilms 1971. Thesis--Michigan State University, 1969. ix, 107 leaves. Bibliography: leaves 101-107. (NAL Call No.: DISS 70-9,635).

0903

Genetic control of the development of haustoria of *Erysiphe graminis* f. sp. *tritici* on wheat / by Mary Joy Haywood. Haywood, Mary Joy, 1931. 1975. Thesis (Ph.D.)--Michigan State University, 1975. Photocopy. Ann Arbor, Mich. : University Microfilms International, 1977. viii, 69 leaves ; 21 cm. Bibliography: leaves 65-69. (NAL Call

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No.: DISS 76-5,566).

0904

Genetic factors conditioning slow rusting in Era wheat (Puccinia graminis f. sp. tritici on Triticum aestivum, wheat genotypes and varieties).

Martinez-Gonzalez, J.M.S. PHYTA. Wilcoxson, R.D.; Stuthman, D.D.; McVey, D.V.; Busch, R.H. St. Paul : American Phytopathological Society. Phytopathology. Feb 1983. v. 73 (2). p. 247-249. 13 ref. (NAL Call No.: 464.8 P56).

0905

The genetics of a distinguishing pigmentation reaction of Typhula idahoensis and Typhula ishikariensis (found in wheat fields).

Bruehl, G.W. PHYTA. Jacobs, D.; Machtmans, R. St. Paul : American Phytopathological Society. Phytopathology. June 1983. v. 73 (6). p. 928-931. Includes references. (NAL Call No.: 464.8 P56).

0906

Genetics of host plant resistance of wheat to Septoria nodorum (Diallel cross, heterosis, glume blotch).

Nelson, L.R. Gates, C.E. Madison, Wis., Crop Science Society of America. Crop science. July/Aug 1982. v. 22 (4). p. 771-773. 14 ref. (NAL Call No.: 64.8 C883).

0907

Genetics of stem rust (Puccinia graminis tritici) resistance in wheat variety Timgalen.
Jain, R. Gandhi, S.M. New Delhi, Indian Society of Genetics & Plant Breeding. Indian journal of genetics & plant breeding. July 1978. v. 38 (2). p. 252-257. ill. 4 ref. (NAL Call No.: 64.8 IN2).

0908

Grain loss assessment and foliage disease control on Hart wheat by use of fungicides, 1982 (Puccinia recondita, Septoria nodorum, Erysiphe graminis tritici, Triticum aestivum).
Reed, H.E. FNETD. Chambers, A.Y. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 62-63. (NAL Call No.: 464.9 AM31R).

0909

Greenhouse evaluation of the adult plant resistance of Sr2 to wheat stem rust (Puccinia graminis).

Sunderwirth, S.D. Roelfs, A.P. St. Paul, Minn., American Phytopathological Society. Phytopathology. July 1980. v. 70 (7). p. 634-637. ill. 17 ref. (NAL Call No.: 464.8 P56).

0910

Growth of uredinia of Puccinia recondita in leaves of slow- and fast-rusting wheat cultivars (Triticum aestivum).

Shaner, G. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. June 1983. v. 73 (6). p. 931-935. Includes references. (NAL Call No.: 464.8 P56).

0911

Haustorium formation by Puccinia hordei in leaves of hypersensitive, partially resistant, and nonhost plant genotypes (Barley leaf rust, Hordeum vulgare, Triticum aestivum, a nonhost species, early cessation of colony growth, structure).

Niks, R.E. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Jan 1983. v. 73 (1). p. 64-66. ill. 10 ref. (NAL Call No.: 464.8 P56).

0912

Hexachlorobenzene (HCB) (a fungicide used on seed grains such as wheat, barley, oats, and rye to control bunt, and a minor use is for seed treatment of onions and sorghum): a review.

Courtney, K.D. New York, Academic Press. Environmental research. Dec 1979. v. 20 (2). p. 225-266. ill. Bibliography p. 260-266. (NAL Call No.: RA565.A1E5).

0913

A histological study of interactions between avirulent races of stem rust (Puccinia graminis tritici) and wheat containing resistance genes Sr5, Sr6, Sr8, or Sr22.

Rohringer, R. Kim, W.K. Ottawa. Canadian journal of botany. Feb 15, 1979. v. 57 (4). p. 324-331. ill. 13 ref. (NAL Call No.: 470 C16C).

0914

Horizontal dispersal of urediospores of Puccinia recondita f. sp. tritici and Puccinia graminis f. sp. tritici from a source plot of wheat.

Eversmeyer, M.G. AR-NC. Kramer, C.L. St. Paul, Minn., American Phytopathological Society.

(PLANT DISEASES - FUNGAL)

Phytopathology. July 1980. v. 70 (7). p. 683-685. ill. 11 ref. (NAL Call No.: 464.8 P56).

0915

How to spot and control: Common wheat diseases in Montana (Mostly fungal diseases).

Dubbs, A. MT. Mathre, D. Bozeman, The Station. Capsule information series. Capsule Inf Ser Mont Agric Exp Stn. May 1979. May 1979. (19). 5 p. ill. 6 ref. (NAL Call No.: S83.M6).

0916

Hybridization of *Typhula ishikariensis* and *Typhula idahoensis* (cause of snow mold on winter wheat in Washington and Idaho).

Christen, A.A. Bruehl, G.W. St. Paul, American Phytopathological Society. Phytopathology. Mar 1979. v. 69 (3). p. 263-266. ill. 13 ref. (NAL Call No.: 464.8 P56).

0917

Identification and characterization of the gene conditioning powdery mildew resistance in 'Amigo' wheat (*Triticum aestivum*, *Erysiphe graminis*).

Lowry, J.R. Sammons, D.J.; Baenziger, P.S.; Moseman, J.G. Madison : Crop Science Society of America. Crop science. Jan/Feb 1984. v. 24 (1). p. 129-132. Includes references. (NAL Call No.: 64.8 C883).

0918

Identification of resistance to *Cephalosporium* stripe in winter wheat (Cultivars, *Cephalosporium gramineum*, soilborne pathogens).

Morton, J.B. Mathre, D.E. St. Paul, Minn., American Phytopathological Society.

Phytopathology. Aug 1980. v. 70 (8). p. 812-817. ill. 26 ref. (NAL Call No.: 464.8 P56).

0919

Identification of resistance to take-all root rot (*Gaeumannomyces graminis*), *Cercospora* (*herpotrichoides*) foot rot, and *Cephalosporium* (*gramineum*) stripe (Wheat).

Powelson, R.L. Corvallis, Or., The Station. Special report. Oregon. Agricultural Experiment Station. June 1979. June 1979. (547). p. 27-28. (NAL Call No.: 100 OR3M).

0920

Identification of the gene for adult-plant leaf rust (*Puccinia recondita*) resistance in (wheat cultivar) Thatcher.

Dyck, P.L. Ottawa, Agricultural Institute of Canada. Canadian journal of plant science. Apr 1979. v. 59 (2). p. 499-501. ill. 6 ref. (NAL Call No.: 450 C16).

0921

Immunological comparisons of teliospores of two wheat bunt fungi, *Tilletia* species, using monoclonal antibodies and antisera (*Tilletia controversa*, *Tilletia caries*, contamination). Banowetz, G.M. Trione, E.J.; Krygier, B.B. Bronx : The New York Botanical Garden. Mycologia. Jan/Feb 1984. v. 76 (1). p. 51-62. ill. Includes references. (NAL Call No.: 450 M99).

0922

Impact of disease on wheat yields in Idaho's Kootenai Valley in 1981 (Fungal diseases, crop losses, statistics).

Wiese, M.V. Herrman, T.; Grube, M. St. Paul, Minn. : American Phytopathological Society. Plant disease. May 1984. v. 68 (5). p. 421-424. ill. Includes references. (NAL Call No.: 1.9 P69P).

0923

Importance of secondary inoculum in strawbreaker foot rot of winter wheat (*Pseudocercospora herpotrichoides*, Washington).

Bruehl, G.W. Machtemes, R.; Murray, T. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1982. v. 66 (9). p. 845-847. 15 ref. (NAL Call No.: 1.9 P69P).

0924

Incidence and distribution of septoria diseases of wheat in California.

Gilchrist, D.G. Brownell, K.H.; Martensen, A.N. St. Paul, Minn., American Phytopathological Society. Plant disease. June 1982. v. 66 (6). p. 513-515. map. Includes 12 ref. (NAL Call No.: 1.9 P69P).

0925

Incidence and severity of take-all of wheat in Indiana (*Gaeumannomyces graminis*, Pathogenic Fungi).

Huber, D.M. St. Paul, Minn., American Phytopathological Society. Plant disease. Sept 1981. v. 65 (9). p. 734-737. maps. 12 ref. (NAL Call No.: 1.9 P69P).

(PLANT DISEASES - FUNGAL)

0926

Incidence of *Cephalosporium* stripe as influenced by winter wheat management practices (*Cephalosporium gramineum*). Latin, R.X. Harder, R.W.; Wiese, M.V. St. Paul, Minn., American Phytopathological Society. Plant disease. Mar 1982. v. 66 c (3). p. 229-230. Includes 15 ref. (NAL Call No.: 1.9 P69P).

0927

Incidence of *Septoria nodorum* in wheat seed and its effects on plant growth and grain yield (*Leptosphaeria nodorum*, *Triticum aestivum*, glume blotch, cultivar differences, storage effects, North Carolina). Babadoost, M. Hebert, T.T. St. Paul, American Phytopathological Society. Plant disease. Feb 1984. v. 68 (2). p. 125-129. ill. Includes references. (NAL Call No.: 1.9 P69P).

0928

Increased take-all of wheat with direct drilling in the Pacific Northwest (*Gaeumannomyces graminis tritici*, conservation tillage, Washington). Moore, K.J. Cook, R.J. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Sept 1984. v. 74 (9). p. 1044-1049. ill. Includes 20 references. (NAL Call No.: 464.8 P56).

0929

The induction and analysis of two classes of mutations affecting pathogenicity in an obligate parasite (*Erysiphe graminis* f. sp. *tritici* on wheat, *Triticum aestivum*, resistance). Gabriel, D.W. Lisker, N.; Ellingboe, A.H. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1982. v. 72 (8). p. 1026-1028. 11 ref. (NAL Call No.: 464.8 P56).

0930

Infection of wheat by *Cephalosporium gramineum* as influenced by freezing of roots (*Triticum*, soilborne leaf stripe disease). Bailey, J.E. PHYTA. Lockwood, J.L.; Wiese, M.V. St. Paul : American Phytopathological Society. Phytopathology. Oct 1982. v. 72 (10). p. 1324-1328. ill. 22 ref. (NAL Call No.: 464.8 P56).

0931

Infection processes of *Puccinia recondita* in slow- and fast-rusting wheat cultivars. PHYTAJ. Lee, T.S. Shaner, G. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Dec 1984. v. 74 (12). p. 1419-1423. Includes 24 references.

0932

Infectivity of *Phythium* spp. zoospores in snow rot of wheat (*Pythium iwayamai* and *Pythium okanaganense*). Lipps, P.E. Bruehl, G.W. St. Paul, Minn., American Phytopathological Society. Phytopathology. Aug 1980. v. 70 (8). p. 723-726. ill. 23 ref. (NAL Call No.: 464.8 P56).

0933

The influence of certain factors on the occurrence of seedling injuring fungi (*Fusarium*, *Drechslera*, *Septoria*) in the resulting crop of cereal seed (oats, barley, wheat). Olsson, L. Zurich, International Seed Testing Association. Seed science and technology. 1979. v. 7 (2). p. 235-246. ill. 7 ref. (NAL Call No.: SB117.S455).

0934

The influence of environment and pathogen variability on the infection of wheat by *Puccinia striiformis* West. / by Richard Gary Beaver. Beaver, Richard Gary. 1939. 1972. Thesis (Ph.D.)--Oregon State University, 1972. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. 72 leaves ; 21 cm. Bibliography: leaves 68-72. (NAL Call No.: DISS 72-5,083).

0935

Influence of growth regulator, herbicide, and N (nitrogen) solution on fungicide disease control, 1982 (Septoria nodorum, Septoria tritici, *Erysiphe graminis*, *Triticum aestivum*, wheat). Frank, J.A. FNETD. Watson, G.R.; Broscious, S.C.; Cole, H. Jr. (s.l.) : The Society. Fungicide and nematicide tests : results - American Phytopathological Society. 1983. v. 38. p. 55. (NAL Call No.: 464.9 AM31R).

(PLANT DISEASES - FUNGAL)

0936

The influence of leaf wetness on wheat leaf rust (*Puccinia recondita*).
 Statler, G.D. Nordgaard, J.T. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. May/June 1981. v. 38 (6). p. 4-5. ill. 9 ref. (NAL Call No.: 100 N813B).

0937

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

1006

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1007

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1008

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1015

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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(PLANT DISEASES - FUNGAL)

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Wheat leaf rust control with foliage fungicides, 1980 (Wheat (*Triticum aestivum* 'McNair 1003'), leaf rust; *Puccinia recondita*). Jones, J.P. Dolezal, W.E.; Collins, F.C. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1981. v. 36. p. 113. (NAL Call No.: 464.9 AM31R).

1095

Wheat leaf rust (*Puccinia recondita tritici*) in North Dakota.
Nolte, P. Statler, G.D. Fargo. North Dakota farm researchNorth Dakota. Agricultural Experiment Station. May/June 1979. v. 36 (6). p. 7-9. ill. 12 ref. (NAL Call No.: 100 N813B).

1096

Wheat leaf rust (*Puccinia recondita tritici*) in North Dakota in 1977 and 1978.
Statler, G.D. Nolte, P. Beltsville, Md., Scince and Education Administration, U.S. Dept. of Agriculture. *Plant disease reporter*. Apr 1979. v. 63 (4). p. 336-340. ill. 11 ref. (NAL Call No.: 1.9 P69P).

1097

Wheat peduncle structure in relation to slow rusting by *Puccinia graminis* f. sp. *tritici* (*Triticum aestivum*).

Palmer, M.L.A. Wilcoxon, R.D. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. May 1982. v. 72 (5). p. 505-506. Includes 12 ref. (NAL Call No.: 464.8 P56).

1098

Wheat-rhizoplane pseudomonads as antagonists of *Gaeumannomyces graminis* (take-all).

Smiley, R.W. Oxford, Pergamon Press. *Soil biology and biochemistry*. 1979. v. 11 (4). p. 371-376. ill. 18 ref. (NAL Call No.: S592.7.A1S6).

1099

The wheat scab epidemic of 1982 (*Fusarium graminearum*, Nebraska).

Boosalis, M.G. FRHQ. Doupenik, B.L. Jr.; Wysong, D.S.; Watkins, J.E. Lincoln : The Station Farm, ranch and home quarterly - Nebraska Agricultural Experiment Station. Winter 1983. v. 29 (4). p. 7-9. ill. 5 ref. (NAL Call No.: 100 N27N).

1100

A wheat stem rust resistance gene common to 12 cultivars of the Fourth International Winter Wheat Performance Nursery (*Puccinia graminis*).

McVey, D.V. AR-NC. Madison, Wis., Crop Science Society of America. *Crop science*. Mar/Apr 1980. v. 20 (2). p. 275-277. ill. 5 ref. (NAL Call No.: 64.8 C883).

1101

Wheat varieties resistant to the Hessian fly and their reactions to stem and leaf rusts by W.B. Cartwright and R.G. Shands.

Cartwright, W. B. Washington, D.C. U.S. Dept. of Agriculture 1944. 6 p. - (NAL Call No.: Fiche S-69 no.877).

1102

Winter survival in a loose smut control trial, 1982 (*Ustilago tritici* on wheat, *Triticum aestivum*).

Buechley, G.FNETD. Shaner, G. (s.l.) : The Society. *Fungicide and nematicide tests : results* - American Phytopathological Society. 1983. v. 38. p. 53. (NAL Call No.: 464.9 AM31R).

1103

Yellow rust (caused by *Puccinia striiformis*) epidemiology (in temperate-cool and wet climates, affecting wheat, barley, and *Triticale*).

Rapilly, F. Palo Alto, Annual Reviews. *Annual review of phytopathology*. 1979. v. 17. p. 59-73. ill. 76 ref. (NAL Call No.: 464.8 AN72).

1104

Yield losses in wheat and barley cultivars from common root rot (caused primarily by *Cochiobolus sativus*) in field tests (in Saskatchewan, 1972-1976).

Tinline, R.D. Ledingham, R.J. Ottawa, Agricultural Institute of Canada. *Canadian journal of plant science*. Apr 1979. v. 59 (2). p. 313-320. ill. 13 ref. (NAL Call No.: 450 C16).

1105

Yield response of soft red winter wheat at Landisville, Pennsylvania to a single late season application of Bayleton, 1979 (Wheat (*Triticum aestivum* 'Dancer')), powdery mildew; *Erysiphe graminis*).

Pederson, W.L. Yocom, J.O. (s.l.), The Society. *Fungicide and nematicide tests: results* - American Phytopathological Society. 1980. v. 35. p. 126. (NAL Call No.: 464.9 AM31R).

PLANT DISEASES - BACTERIAL

1106

Bacterial mosaic, a new corynebacterial disease of wheat (*Corynebacterium michiganense*).
Carlson, R.R. Vidaver, A.K. St. Paul, Minn., American Phytopathological Society. Plant disease. Jan 1982. v. 66 (1). p. 76-79. ill., map. 16 ref. (NAL Call No.: 1.9 P69P).

1107

Biological control attempts using five species of *Bacillus* as seed-treatments of wheat.
Lengkeek, V.H. Otta, J.D. Grand Forks, The Academy. Proceedings of the North Dakota Academy of Science. Apr 1979. v. 33. p. 2. 2 ref. (NAL Call No.: 500 N813).

1108

The effects of *Septoria nodorum* (causal organism of glume blotch) and *Xanthomonas translucens* f. sp. *undulosa* (incitant of black chaff) on photosynthesis and transpiration of wheat flag leaves.
Jones, J.B. Roane, C.W.; Wolf, D.D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Nov 1981. v. 71 (11). p. 1173-1177. 20 ref. (NAL Call No.: 464.8 P56).

1109

Influence of temperature and light on severity of bacterial blight (*Pseudomonas avenae*) of corn, oats, and wheat.
Schaad, N.W. Sumner, D.R.; Ware, G.O. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1980. v. 64 (5). p. 481-483. ill. 8 ref. (NAL Call No.: 1.9 P69P).

1110

The role of stored-product insects in distributing *Salmonella montevideo* in wheat / by Martin H. Crumrine.
Crumrine, Martin H., 1944. 1970. Thesis (Ph.D.)--Kansas State University, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. iii, 50 leaves ; 21 cm. Bibliography: leaves 44-49. (NAL Call No.: DISS 71-17,353).

1111

Sick wheat.
Wilcox, Robert A. MacMasters, Majel M. 1979. This publication discusses sick wheat. It mentions heat damage, but emphasizes moisture, temperature, and time during storage. It also gives some guidelines for prevention of sick wheat. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 7 p. : ill. (NAL Call No.: Not available at NAL.).(NAL Call No.: C 321).

1112

Ultrastructure of the interaction between the take-all fungus (*Gaeumannomyces graminis*) and antagonistic bacteria (*Bacillus mycoides*, wheat diseases, natural control).
Faulk, J.L. Campbell, R. Ottawa, National Research Council of Canada. Canadian journal of botany. Sept 1, 1979. v. 57 (17). p. 1800-1808. ill. 25 ref. (NAL Call No.: 470 C16C).

1113

Wheat ecofallow; wheat diseases associated with crop residues (Pathogenic fungi and bacteria).
Watkins, J.E. Boosalis, M.G. Lincoln, The Station. Farm, ranch and home quarterly - Nebraska Agricultural Experiment Station. Winter 1982. v. 28 (4). p. 9-12. ill. (NAL Call No.: 100 N27N).

1114

White blotch incited in wheat by *Bacillus megaterium* pv. *cerealis* (*Triticum*).
Hosford, R.M. Jr. PHYTA. St. Paul : American Phytopathological Society. Phytopathology. Nov 1982. v. 72 (11). p. 1453-1459. ill. 46 ref. (NAL Call No.: 464.8 P56).

PLANT DISEASES - VIRAL

1115

Assessment of losses on spring wheat naturally infected with barley yellow dwarf virus (in Manitoba).

Gill, C.C. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1980. v. 64 (2). p. 197-203. ill., map. 10 ref. (NAL Call No.: 1.9 P69P).

1116

Barley yellow dwarf virus translocation in wheat and oats.

Carrigan, L.L. CRPSA. Ohm, H.W.; Foster, J.E. Madison : Crop Science Society of America. Crop science. July/Aug 1982. v. 23 (4). p. 611-612. Includes references. (NAL Call No.: 64.8 C883).

1117

Control of wheat streak mosaic virus with vector resistance in wheat (Wheat curl, Eriophyes tulipae, wheat curl mite as insect vector, Kansas).

Martin, T.J. Harvey, T.L.; Bender, C.G.; Seifers, D.L. St. Paul, Minn. : American Phytopathological Society. Phytopathology. Aug 1984. v. 74 (8). p. 963-964. Includes 14 references. (NAL Call No.: 464.8 P56).

1118

Control of wheat streak mosaic with chemicals in relation to the epidemiology of the disease / by Lloyd W. Andersen.

Andersen, Lloyd W. (Lloyd William). 1924. 1971. Thesis (Ph.D.)--University of Nebraska, 1971. Photocopy. Ann Arbor, Mich. : University Microfilms, 1972. 101 leaves ; 21 cm. Bibliography: leaves 96-101. (NAL Call No.: DISS 71-28,593).

1119

Control of wheat virus diseases.

Niblett, C.L. Minneapolis, Minn. : Published for the Congress by Burgess Pub., c1981. Proceedings of symposia : IX International Congress of Plant Protection, Washington, D.C., U.S.A., August 5-11, 1979 / editor, Thor Kommedahl. p. 444-448. (NAL Call No.: SB951.I5 1979).

1120

Controlling wheat curl mite (Eriophyes tulipae) and wheat streak mosaic virus with systemic insecticide.

Harvey, T.L. Martin, T.J. College Park, Md., Entomological Society of America. Journal of economic entomology. Dec 1979. v. 72 (6). p. 854-855. ill. 11 ref. (NAL Call No.: 421 J822).

1121

Cytoplasmic inclusions induced by wheat streak mosaic virus.

McMullen, C.R. Gardner, W.S. New York, Academic Press. Journal of ultrastructure research. July 1980. July 1980. v. 72 (1). p. 65-75. ill. 26 ref. (NAL Call No.: 440.8 J822).

1122

Diallel analyses for tolerance in winter wheat to the barley yellow dwarf virus.

Cisar, G. Brown, C.M.; Jedlinski, H. Madison, Wis., Crop Science Society of America. Crop science. Mar/Apr 1982. v. 22 (2). p. 328-333. Includes 15 ref. (NAL Call No.: 64.8 C883).

1123

Disease and insect control through breeding: Resistnace to viruses (Diseases of wheat, vectors, fungi).

Brown, C.M. (Beltsville, Md. : USDA, Agricultural Research Service, Northeastern Region, 1982). National Wheat Research Conference, Beltsville, Md., Oct. 26-28, 1982 / presented by Natl. Assoc. Wheat Growers Foundation in co-op. Agric. Res. Serv., USDA and Natl. Wheat Improvement Committee. p. 166-170. (NAL Call No.: aSB191.W5N38 1982).

1124

Effect of barley yellow dwarf virus infection on the development of root rot caused by Cochliobolus sativus in Avena sativa and Triticum durum / by Donald Howard Scott.
Scott, Donald Howard, 1934. 1968. Thesis (Ph.D.)--University of Illinois, 1968. Photocopy. Ann Arbor, Mich. : University Microfilms, 1970. iv, 102 leaves : ill. ; 21 cm. Bibliography: leaves 83-87. (NAL Call No.: DISS 69-10,842).

1125

Effect of fall or spring infection and sources of tolerance of barley yellow dwarf of winter wheat (Aphid vector, resistance, virus, yield loss).

Cisar, G. Brown, C.M.; Jedlinski, H. Madison, Wis., Crop Science Society of America. Crop science. May/June 1982. v. 22 (3). p. 474-478. 28 ref. (NAL Call No.: 64.8 C883).

1126

Effect of temperature on susceptibility of normal and aberrant ratio corn stocks to barley stripe mosaic and wheat streak mosaic viruses (Virus-induced mutations).

Brakke, M.K. Samson, R. St. Paul, Minn., American Phytopathological Society.

(PLANT DISEASES - VIRAL)

Phytopathology. Aug 1981. v. 71 (8). p. 823-824. 7 ref. (NAL Call No.: 464.8 P56).

1127

Effect of wheat streak mosaic virus on twelve hard red spring wheat cultivars (vectored by the wheat curl mite *Eriophyes tulipae*).
Jons, V.L. Timian, R.G.; Lamey, H.A. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. Sept/Oct 1981. v. 39 (2). p. 17-18. ill. 5 ref. (NAL Call No.: 100 N813B).

1128

Effects of wheat pubescence on infestations of wheat curl mite (*Eriophyes tulipae*, insect vector) and incidence of wheat streak mosaic (virus).
Harvey, T.L. Martin, T.J. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1980. v. 73 (2). p. 225-227. ill. 11 ref. (NAL Call No.: 421 J822).

1129

Effects of wheat soilborne mosaic on several plant characters of winter wheat.
Nykaza, S.M. Heyne, E.G. Beltsville, Md., Science and Education Administration, U.S. Dept. of Agriculture. Plant disease reporter. July 1979. v. 63 (7). p. 594-598. ill. 12 ref. (NAL Call No.: 1.9 P69P).

1130

Effects of wheat spindle streak mosaic virus on winter wheat.
Nguyen, H.T. Pfeifer, R.P. St. Paul, Minn., American Phytopathological Society. Plant disease. Feb 1980. v. 64 (2). p. 181-184. ill. 17 ref. (NAL Call No.: 1.9 P69P).

1131

Evaluation of seed treatment for the control of wheat soil-borne mosaic of wheat, 1979 (Wheat (*Triticum aestivum* 'Eagle' and 'Newton'), *Polymyxa graminis*, wheat soil-borne mosaic virus (WSBMV)).
Lengkeek, V.H. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society. 1980. v. 35. p. 208. (NAL Call No.: 464.9 AM31R).

1132

Further evidence for the association of *Polymyxa graminis* with the transmission of wheat spindle streak mosaic virus (Zoosporic fungi, possible disease vectors).

Nolt, B.L. Romaine, C.P.; Smith, S.H.; Cole, H. Jr. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1981. v. 71 (12). p. 1269-1272. Includes 15 ref. (NAL Call No.: 464.8 P56).

1133

Identification and occurrence of wheat streak mosaic virus in winter wheat in Colorado and its effects on several wheat cultivars (Primary inoculum sources, yield loss).
Shahwan, I.M. Hill, J.P. St. Paul, Minn. : American Phytopathological Society. Plant disease. July 1984. v. 68 (7). p. 579-581. Includes references. (NAL Call No.: 1.9 P69P).

1134

Immunohistochemical localization of barley stripe mosaic virions in infected wheat cells (*Triticum aestivum*, *Hordeum vulgare*).
Lin, N.S. JULRA. Langenberg, W.G. New York : Academic Press. Journal of ultrastructure research. July 1983. v. 84 (1). p. 16-23. ill. Includes references. (NAL Call No.: 440.8 J822).

1135

Inheritance of resistance to soil borne mosaic in wheat (*Triticum aestivum*).
Merkle, O.G. CRPSAY. Smith, E.L. Madison : Crop Science Society of America. Crop science. Nov/Dec 1983. v. 23 (6). p. 1075-1076. Includes references. (NAL Call No.: 64.8 C883).

1136

Lack of barley yellow dwarf virus dosage effects on virus content in cereals (Wheat, oats, barley).
Skaria, M. Lister, R.M.; Foster, J.E. St. Paul, Minn. : American Phytopathological Society. Plant disease. Sept 1984. v. 68 (9). p. 759-761. Includes 24 references. (NAL Call No.: 1.9 P69P).

1137

Occurrence of American wheat striate mosaic virus in corn.
Jons, V. APHIS. St. Paul, Minn., American Phytopathological Society. Plant disease. June 1980. v. 64 (6). p. 524. (NAL Call No.: 1.9 P69P).

(PLANT DISEASES - VIRAL)

1138

A procedure to identify resistance to wheat soilborne mosaic in wheat seedlings (*Triticum aestivum*, *Polymyxa graminis*, fungal vectors, resistant cultivars, Kansas).

Bockus, W.W. Niblett, C.L. St. Paul, American Phytopathological Society. Plant disease. Feb 1984. v. 68 (2). p. 123-124. Includes references. (NAL Call No.: 1.9 P69P).

1139

Procedures for evaluating wheat streak mosaic virus resistance (*Aceria tulipae* as insect vector).

Martin, T.J. Beltsville, Md., Plant Science Research Division, Agricultural Research Service, U.S. Dept. of Agriculture. Plant disease reporter. Dec 1978. v. 62 (12). p. 1062-1066. ill. 6 ref. (NAL Call No.: 1.9 P69P).

1140

Purification and properties of soil-borne wheat mosaic virus / by David J. Gumpf.

Gumpf, David J. (David John). 1942. 1970. Thesis (Ph.D.)--University of Nebraska, 1970. Photocopy. Ann Arbor, Mich. : University Microfilms, 1971. 62 leaves ; 21 cm. Bibliography: leaves 58-62. (NAL Call No.: DISS 71-2,889).

1141

Response of winter wheat cultivars to barley yellow dwarf virus infection.

Carrigan, L.L. Ohm, H.W.; Foster, J.E.; Patterson, F.L. Madison, Wis., Crop Science Society of America. Crop science. May/June 1981. v. 21 (3). p. 377-380. ill. 17 ref. (NAL Call No.: 64.8 C883).

1142

Separation of Montana isolates of wheat streak mosaic virus on Michigan amber wheat.

Carroll, T.W. Zaske, S.K.; Blansky, R.H. St. Paul, Minn., American Phytopathological Society. Plant disease. Oct 1982. v. 66 (10). p. 916-918. 11 ref. (NAL Call No.: 1.9 P69P).

1143

Soil-borne wheat mosaic.

Watkins, J. E. Brakke, M. K.; Langenberg, W. G. & NebGuide. Document available from: University of Nebraska-Lincoln, Dept. of Agricultural Communications, Lincoln, Nebraska 68583 1978. Discusses symptoms, vector and control measures for soil born wheat mosaic. 1 sheet : ill. (NAL Call No.: Document available from source.).(NAL Call No.: G74-202).

1144

Three-dimensional structure of pinwheel inclusions as determined by analytic geometry (Wheat streak mosaic virus, tobacco etch virus).

Mernaugh, R.L. Gardner, W.S.; Yocom, K.L. New York, Academic Press. Virology. Oct 30, 1980. v. 106 (2). p. 273-281. ill. 16 ref. (NAL Call No.: 448.8 V81).

1145

Tolerance studies to wheat streak mosaic virus in winter and spring wheats.

Rahman, Fazal. Ann Arbor, Mich. University Microfilms 1973. Thesis--South Dakota State University, 1972. 52 leaves. Bibliography: leaves 44-48. (NAL Call No.: DISS 73-12,019).

1146

Transcription in vitro of cauliflower mosaic virus DNA by RNA polymerase I, II, and III purified from wheat embryos.

Teissere, M. Durand, R. New York, Academic Press. Biochemical and biophysical research communications. July 27, 1979. v. 89 (2). p. 526-533. ill. 20 ref. (NAL Call No.: 442.8 B5236).

1147

Translation of eggplant mosaic virus RNA in wheat germ extracts and reticulocyte lysates. Ricard, B. Renaudin, H. New York. Virology. Dec 1978. v. 91 (2). p. 305-311. ill. 22 ref. (NAL Call No.: 448.8 V81).

1148

Translation of southern bean mosaic virus RNA in wheat embryo and rabbit reticulocyte extracts.

Salerno-Rife, T. SEA. Rutgers, T.; Kaesberg, P. Washington, D.C., American Society for Microbiology. Journal of virology. Apr 1980. v. 34 (1). p. 51-58. ill. 28 ref. (NAL Call No.: QR360.J6).

1149

Transmission studies of soil-borne wheat mosaic virus / by Rodulfo P. Pacumbaba.

Pacumbaba, Rodulfo P., 1935. 1970.

Thesis--Kansas State University. Photocopy of typescript. Ann Arbor: University Microfilms, 1971. iv, 142 leaves. Bibliography: leaves 134-140. (NAL Call No.: DISS 70-16,640).

(PLANT DISEASES - VIRAL)

1150

Ultrastructure of fungal plant virus vectors
Polymyxa graminis in soilborne wheat mosaic
virus-infected wheat and Polymyxa betae in beet
necrotic yellow vein virus-infected sugarbeet
(Triticum aestivum, Beta vulgaris).
Langenberg, W.G. Giunchedi, L. St. Paul, Minn.,
American Phytopathological Society.
Phytopathology. Sept 1982. v. 72 (9). p.
1152-1158. ill. 25 ref. (NAL Call No.: 464.8
P56).

1151

Wheat germ protein kinase affects the
translation of brome mosaic virus ribonucleic
acid in vitro.
Rychlik, W. Kupidlowska, E.; Nowak, E.;
Zagorski, W. Easton, Pa., American Chemical
Society. Biochemistry. Nov 11, 1980. v. 19
(23). p. 5249-5255. ill. 18 ref. (NAL Call No.:
381 B523).

1152

Wheat spindle streak mosaic virus.
Hart, L. P. Fulbright, D. W.; Ravenscroft, A.;
Haufler, K. Z. Document available from:
Michigan State University, Bulletin Office,
P.O. Box 231, East Lansing, Michigan 48824 1981.
Discusses symptoms; disease cycle; control; and
crop loss due to this virus. 1 sheet : ill.
(NAL Call No.: Document available from
source.).(NAL Call No.: EB E-808).

1153

Wheat spindle streak mosaic virus in Nebraska
(Triticum aestivum).
Brakke, M.K. Langenberg, W.G.; Samson, R.G. St.
Paul, Minn., American Phytopathological
Society. Plant disease. Oct 1982. v. 66 (10).
p. 958-959. ill. 11 ref. (NAL Call No.: 1.9
P69P).

1154

Wheat streak mosaic virus in wild rice (Zizania
aquatica).
Berger, P.H. Percich, J.A.; Ransom, J.K. St.
Paul, Minn., American Phytopathological
Society. Plant disease. Aug 1981. v. 65 (8). p.
695-696. ill. 7 ref. (NAL Call No.: 1.9 P69P).

1155

Wheat streak mosaic virus: increased yields of
purified virus from corn.
Uyemoto, J.K. Ferguson, M.W. St. Paul, Minn.,
American Phytopathological Society. Plant
disease. May 1980. v. 64 (5). p. 460-462. ill.
11 ref. (NAL Call No.: 1.9 P69P).

1156

Wheat striate mosaic virus (on maize) in the
Dakotas and Minnesota.
Jons, V.L. Timian, R.G.; Gardner, W.S.;
Stomberg, E.L.; Berger, P. St. Paul, Minn.,
American Phytopathological Society. Plant
disease. May 1981. v. 65 (5). p. 447-448. ill.
7 ref. (NAL Call No.: 1.9 P69P).

1157

Wheat virus diseases in southwestern Kansas.
Lengkeek, Venance H. 1979. This publication
discusses three wheat virus diseases in Kansas,
the soil borne mosaic, wheat streak, & barley
yellow dwarf. It also includes their main
location, symptoms, & control. Document
available from: Distribution Center, Umberger
Hall, Kansas State Univ., Manhattan, KS 66506.
1 sheet. (NAL Call No.: AF 41).

PLANT DISEASES - PHYSIOLOGICAL

1158

Aluminum tolerances of two wheat genotypes related to nitrate reductase activities (*Triticum aestivum*, acid soil tolerance, effects on the two nitrate reductase systems, toxicity, chlorosis).

Foy, C.D. JPNUD. Fleming, A.L. New York : Marcel Dekker. Journal of plant nutrition. 1982. v. 5 (11). p. 1313-1333. ill. 27 ref. (NAL Call No.: QK867.J67).

1159

Copper and manganese fertilization of wheat on an organic soil--Roseau county, (Minnesota), 1981 (Nutrient deficiencies).

Jokela, W.E. O'Leary, M. St. Paul : The Station. Miscellaneous publication - University of Minnesota, Agricultural Experiment Station. 1982. 1982. (2). p. 197-199. (NAL Call No.: S1.M52).

1160

The diagnosis of nitrogen deficiency in wheat by means of a critical nitrate concentration in stem bases.

Papastilianou, I. Graham, R.D.; Puckridge, D.W. New York, Marcel Dekker. Communications in soil science and plant analysis. 1982. v. 13 (6). p. 473-485. ill. 21 ref. (NAL Call No.: S590.C63).

1161

Dry matter production in tops and roots of winter wheat as affected by phosphorus availability during various growth stages (*Triticum aestivum*, includes deficiency effects).

Sutton, P.J. AGJOA. Peterson, G.A.; Sander, D.H. Madison : American Society of Agronomy. Agronomy journal. July/Aug 1983. v. 75 (4). p. 657-663. ill. Includes references. (NAL Call No.: 4 AM34P).

1162

Early lodging of soft white wheat (Yields). Pumphrey, F.V. Corvallis, Or., The Station. Special report - Oregon Agricultural Experiment Station. July 1981. July 1981. (633). p. 1-4. (NAL Call No.: 100 DR3M).

1163

Effect of sulphur deficiency on wheat quality. Wrigley, C.W. Cros, D.L. du; Moss, H.J.; Randall, P.J.; Fullington, J.G. Washington, D.C. : The Sulphur Institute. Sulphur in agriculture. 1984. v. 8. p. 2-7. ill. Includes references. (NAL Call No.: S587.5.S9S9).

1164

Evaluation of the need for copper with several soil extractants (Deficiencies, critical levels, soybeans, *Glycine max*, corn, *Zea mays*, wheat, *Triticum aestivum*, soils from the Atlantic Coastal Plain, North Carolina).

Makarim, A.K. AGJOA. Cox, F.R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 493-496. Includes references. (NAL Call No.: 4 AM34P).

1165

Experiments on correcting iron deficiency in plants (*Atriplex lentiformis*, soybeans, wheat). Wallace, A. Wallace, G.A.; Abou-Zamzam, A.M. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1984. Presented at the "Second International Symposium on Iron Nutrition and Interactions in Plants," August 2-5, 1983, Utah State University, Logan. v. 7 (1/5). p. 211-222. Includes references. (NAL Call No.: QK867.J67).

1166

Increases in phosphatase and beta-glucosidase activities in wheat seedlings in response to phosphorus-deficient growth.

Smyth, D.A. Chevalier, P. New York, N.Y. : Marcel Dekker. Journal of plant nutrition. 1984. v. 7 (8). p. 1221-1231. ill. Includes references. (NAL Call No.: QK867.J67).

1167

Manganese deficiency and toxicity effects on growth, development, and nutrient composition in wheat (*Triticum aestivum*, Solution culture under greenhouse conditions).

Ohki, K. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 213-218. ill. Includes references. (NAL Call No.: 4 AM34P).

1168

Manganese deficiency in Indiana soils.

Hood, E. L. Spies, C. D. & Agronomy guide. 197?. This publication deals with manganese deficiencies in Indiana. Included in the article are the locations of deficiency problems and how to recognize manganese deficiencies in soybeans, oats, wheat, and corn. To correct a manganese deficiency a section discusses how to amend or correct the problem. Sampling plants for deficiency tests are also mentioned in the publication. Document available from: Mailing Room, Ag. Admin. Bldg., Purdue Univ., West Lafayette, IN 47907. 1 sheet. (NAL Call No.: AY-100).

(PLANT DISEASES - PHYSIOLOGICAL)

1169

Nitrogen metabolism and yellowberry of two bread wheat cultivars (Starchiness or mottle, grain disorder).
Henson, J.F. CRPSA. Waines, J.G. Madison : Crop Science Society of America. Crop science. Jan/Feb 1983. v. 23 (1). p. 20-22. illl. Includes references. (NAL Call No.: 64.8 C883).

1170

Sampling for yellowberry control (Durum wheat, related to irrigation and fertilization practices).
Pryor, A. San Francisco, California Farmer Publishing Co. California farmer. Feb 21, 1981. v. 254 (4). p. 32-G. (NAL Call No.: S1.C185).

1171

Technical progress in yields--no substitute for soil conservation (Effect of top soil erosion on wheat yield, Idaho).
Walker, D.J. Young, D.L. Moscow : The Service. Current information series - Cooperative Extension Service, University of Idaho. Dec 1982. Dec 1982. (671). 5 p. illl. Includes references. (NAL Call No.: 275.29 ID13IDC).

MISCELLANEOUS PLANT DISORDERS

1172

Alpha-amylase activity and preharvest sprouting damage in Kansas hard white wheat.

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(PROTECTION OF PLANT PRODUCTS - INSECTS)

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spp.*, *Cryptolestes spp.*, *Oryzaephilus spp.*).
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1305

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Document available from: Iowa State University, Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011 1980. This publication is a progress report and should not be considered conclusive. The topics covered are soil moisture report, K fertilization for corn and soybeans, sunflower populations, conservation tillage, crop disease trap plots, corn herbicides, spring wheat variety demonstration, musk thistle control, grain sorghum trial, and small grain selection. 17 p. : ill. (NAL Call No.: Document available from source.).(NAL Call No.: ORC 80-10).

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1981. This publication provides test information on grain sorghum, winter wheat, birdsfoot trefoil, and alfalfa management. Limestone rates and pasture interseeding systems are covered. Document available from: Iowa State Univ., Publications Distribution, Printing & Publications Bldg., Ames, Iowa 50011. 14 p. : ill. (NAL Call No.: Not

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Rydrych, D.J. OR. Corvallis, Or., The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1980. June 1980. (571). p. 102-109. (NAL Call No.: 100 OR3M).

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1314

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Peeler, T.F. Champaign, Ill. : Weed Science Society of America. Weed science. 1984. Literature review. v. 32 (suppl.). p. 18-25. Includes references. (NAL Call No.: 79.8 W41).

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French, E.W. ND. Riveland, N. Fargo, N.D., The Station. North Dakota farm research - North Dakota, Agricultural Experiment Station. July/Aug 1980. v. 38 (1). p. 12-15. 4 ref. (NAL Call No.: 100 N813B).

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Ehmke, V. June 1979. v. 94 (6). Progressive farmer for the West. June 1979. v. 94 (6). p. 16-17. ill. (NAL Call No.: 6 T311).

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Senft, D.H. Washington, Science and Education Administration, U.S. Dept. of Agriculture. Agricultural research. Apr 1979. v. 27 (10). p. 13. ill. (NAL Call No.: 1.98 AG84).

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Fay, P. Rardon, P. Bozeman, The Station. Capsule information series - Montana Agricultural Experiment Station. June 1980. June 1980. (21). 2 p. ill. (NAL Call No.: S83.M6).

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Retzinger, E.J. Jr. LOAGA. Richard, P.A. Baton Rouge : The Station. Louisiana agriculture - Louisiana Agricultural Experiment Station. Fall 1983. v. 27 (1). p. 14-15. ill. (NAL Call No.: 100 L939).

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Rydrych, D.J. Champaign, Ill., Weed Science Society of America. Weed science. May 1981. v. 29 (3). p. 360-363. (NAL Call No.: 79.8 W41).

1328

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Steller, W.A. New York, Academic Press, 1980. Updated general techniques and additional pesticides, edited by Gunter Zweig and Joseph Sherma. p. 291-305. ill. 3 ref. (NAL Call No.: 395).

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Lawrence, J.F. Panopio, L.G.; McLeod, H.A. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry*. July/Aug 1981. v. 29 (4). p. 887-889. 8 ref. (NAL Call No.: 381 J8223).

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Westlake, G.E. PCB PB. Bunyan, P.J.; Johnson, J.A.; Martin, A.D.; Stanley, P.I. New York : Academic Press. *Pesticide biochemistry and physiology*. Aug 1982. v. 18 (1). p. 49-56. ill. Includes references. (NAL Call No.: SB951.P49).

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WEESA6. Carlson, K.L. Burnside, O.C. Champaign, Ill. : Weed Science Society of America. *Weed science*. Nov 1984. v. 32 (6). p. 841-844. ill. Includes 9 references.

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1433

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1462

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1468

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1469

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 Bibliography: leaves 94-98. (NAL Call No.: DISS 70-1,447).

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 Romanowski, R.R. Borowy, A. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1979. v. 27 (2). p. 151-153. ill. 6 ref. (NAL Call No.: 79.8 W41).

1472

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1473

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1474

Status of malathion resistance in five genera of beetles infesting farm-stored corn, wheat, and oats in the United States (*Tribolium castaneum*, *Rhyzopertha dominica*, *Sitophilus spp.*, *Cryptolestes spp.*, *Oryzaephilus spp.*).
 Haliscak, J.P. JEENA. Beeman, R.W. College Park : Entomological Society of America. Journal of economic entomology. Aug 1983. v. 76 (4). p. 717-722. maps. Includes references. (NAL Call No.: 421 J822).

1475

Temperature effect on difenzoquat phytotoxicity (Wheat, *triticum aestivum*, barley, *Hordeum vulgare*, wild oat, *Avena fatua*).
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1476

Those overworked and oft-misused mean separation procedures--Duncan's, LSD (least significant difference), etc. (Fungal disease control, wheat, phytonematodes, fungicides, nematicides).
 Swallow, W.H. St. Paul, Minn. : American Phytopathological Society. Plant disease. Oct 1984. v. 68 (10). p. 919-921. Includes 5 references. (NAL Call No.: 1.9 P69P).

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1477

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1478

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1479

Wheat, oats and barley seed treatment fungicides.

Willis, William G. 1980. This publication discusses the diseases, insects and chemical effectiveness of treating wheat, oats, and barley seeds with fungicides. It also includes a table of different brands of fungicides and their effectiveness. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 4 p. (NAL Call No.: AF66).

1480

1980 Kansas field crop insect control recommendations.

Brooks, Leroy. Gates, Dell E. 1980. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 27 p. (NAL Call No.: C 431).

1481

1981 Kansas field crops insect control recommendations.

Brooks, Leroy. Gates, Dell E. 1981. First this publication discusses some safety tips for using insecticides, then it discusses the control of insects attacking alfalfa, corn, sorghum, wheat, and soybeans. It also includes a list of the Poison Control Information Centers in Kansas. Document available from: Distribution Center, Umberger Hall, Kansas State University, Manhattan, KS 66506. 28 p. (NAL Call No.: C 431).

SOIL SCIENCE

1482

Decomposition of wheat straw infested by Cephalosporium gramineum (Soils).

Mathre, D.E. Johnston, R.H. Oxford, Pergamon Press. Soil biology and biochemistry. 1979. v. 11 (6). p. 577-580. ill. 17 ref. (NAL Call No.: S592.7.A1S6).

1483

Effect of surface soil temperature on early growth, nutrient uptake, and nutrient translocation by spring wheat (*Triticum aestivum*).

Boatwright, Glennis Owen, 1928. Ann Arbor, Mich. University Microfilms 1971. Thesis--Montana State University, 1970. viii, 75 leaves. Bibliography: leaves (69)-75. (NAL Call No.: DISS 71-8,103).

1484

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Johnen, B.G. Oxford. Soil biology and biochemistry. 1978. v. 10 (6). p. 495-502. ill. 16 ref. (NAL Call No.: S592.7.A1S6).

1485

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Douglas, C.L. Jr. Allmaras, R.R. Corvallis, Or., The Station. Special report.Oregon. Agricultural Experiment Station. June 1979. June 1979. (547). p. 21-23. ill. (NAL Call No.: 100 DR3M).

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1486

Availability of ^{15}N (nitrogen isotope)-labeled nitrogen in fertilizer and in wheat straw to wheat in tilled and no-till soil (Denitrification).

Fredrickson, J.K. SSSJD. Koehler, F.E.; Cheng, H.H. Madison : The Society. Journal - Soil Science Society of America. Nov/Dec 1982. v. 46 (6). p. 1218-1222. 28 ref. (NAL Call No.: 56.9 S03).

1487

The effect of nitrification inhibitors on wheat yields and soil nitrogen retention.

Varsa, E.C. Liu, S.L.; Kapusta, G. Midland, Mich., Agricultural Products Dept., Dow Chemical Co. Down to earth. Sept 1981. v. 37 (3). p. 1-5. ill. Includes 2 ref. (NAL Call No.: 381 D75).

1488

Effects of ammonium on growth and nutrient assimilation by wheat / by Walter Jacob Cox.
Cox, Walter Jacob, 1943. 1971. Thesis (Ph.D.)--University of California, Davis, 1971. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. xiii, 92 leaves ; 21 cm. Bibliography: leaves 89-92. (NAL Call No.: DISS 72-17,900).

1489

Influence of vesicular-arbuscular mycorrhizae and soil phosphorus on take-all disease of wheat (caused by *Gaeumannomyces graminis*, mycorrhizal fungus, *Glomus fasciculatus*).
Graham, J.H. Menge, J.A. St. Paul, Minn.. American Phytopathological Society. Phytopathology. Jan 1982. v. 72 (1). p. 95-98. Includes 22 ref. (NAL Call No.: 464.8 P56).

1490

Scientists find fungus can help wheat resist drought (U.S. Department of Agriculture microbiologist James R. Ellis, vesicular-arbuscular mycorrhizae).
Washington : The Office. Major news releases and speeches - United States Department of Agriculture, Office of Governmental and Public Affairs. Aug 12/19, 1983. Aug 12/19, 1983. p. 14-15. (NAL Call No.: aS21.A8U51).

1491

A simplified soil and plant phosphorus model. III. Testing (Simulated responses for maize and wheat, fertilizers).
Jones, C.A. Sharpley, A.N.; Williams, J.R. Madison, Wis. : The Society. Journal - Soil Science Society of America. July/Aug 1984. v.

48 (4). p. 810-813. ill. Includes 15 references. (NAL Call No.: 56.9 S03).

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SOIL CULTIVATION

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moisture wheat. Document available from: Mailing Room, Ag. Administration Bldg., Purdue University, West Lafayette, IN 47907. 22 p. : ill. (NAL Call No.: ID-96).

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WATER RESOURCES AND MANAGEMENT

1726

**Heavy metal absorption by winter wheat
following termination of cropland sludge
applications.**

Chang, A.C. Page, A.L.; Bingham, F.T. Madison :
American Society of Agronomy. Journal of
environmental quality. Oct/Dec 1982. v. 11 (4).
p. 705-708. 17 ref. (NAL Call No.: QH540.J6).

1727

**Nitrate-nitrogen leaching following urea
fertilization and irrigation (Wheat).**

Bauder, J.W. Schneider, R.P. Madison, Wis. Soil
Science Society of America journalSoil Science
Society of America. Mar/Apr 1979. v. 43 (2). p.
348-352. ill. 17 ref. (NAL Call No.: 56.9 S03).

DRAINAGE AND IRRIGATION

1728

Automated irrigation and nutrient injection system for closed environmental growth chambers (Winter wheat).

McKinion, J.M. Hodges, H.F.; Acock, B. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1983. Paper presented at the 1983 Winter Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1983. (fiche no. 83-4527). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1729

Effect of magnesium-rich waters on soil properties, yield, and chemical composition of wheat (Irrigation).

Girdhar, I.K. SOSCA. Yadav, J.S.P. Baltimore : Williams & Wilkins. Soil science. Dec 1982. v. 134 (6). p. 348-353. 14 ref. (NAL Call No.: 56.8 S03).

1730

Salt-tolerant crops solution to a complex problem (Barley, wheat, tomatoes, California, irrigation with seawater).

Rush, D.W. Kelley, D.B.; Richards, R.; Norlyn, J.D.; Kingsbury, R.W.; Cunningham, G.A. Madison, Wis., American Society of Agronomy. Crops and soils magazine. Oct 1981. v. 34 (1). p. 12-16. ill. (NAL Call No.: 6 W55).

1731

Using "blowdown" water to irrigate crops (Power plant cooling water, salinization, wheat, sorghum, California).

Jury, W.A. CAGRA. Stolzy, L.H.; Fox, C.A.; Vaux, H.J. Jr.; Straughan, I.R. Berkeley : The Station. California agriculture - California Agricultural Experiment Station. Mar/Apr 1983. v. 37 (3/4). p. 4-5. ill. (NAL Call No.: 100 C12CAG).

1732

Wheat and barley growth and N (nitrogen) fertilizer utilization under sprinkler irrigation (Varieties).

Christensen, N.W. Killorn, R.J. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1981. v. 73 (2). p. 307-312. ill. 16 ref. (NAL Call No.: 4 AM34P).

FOOD SCIENCE, FIELD CROP

1733

Detection of hidden insect infestations in wheat by infrared carbon dioxide gas analysis (Grain inspection).

Bruce, W.A. Street, M.W.; Semper, R.C.; Fulk, D. New Orleans : The Region. Advances in agricultural technology. AAT-S - United States, Dept. of Agriculture, Agricultural Research Service, Southern Region. July 1982. July 1982. (AAT-S-26). 8 p. ill. Includes references. (NAL Call No.: AS21.A75U7).

FOOD PROCESSING, FIELD CROP

1734

2 p. ref. (NAL Call No.: SB188.2.C368).

Comparison of low-temperature wheat drying management procedures (5 procedures, energy consumption, grain quality, microorganism, baking quality, germination).

Muhlbauer, W. Stahl, T.; Hofacker, W.; Reisinger, G. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3006). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1735

The effect of rapeseed oil added to control grain dust on the quality of wheat (Includes barley, oats, rye).

Hsieh, F.H. Daun, J.K.; Tipples, K.H. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Jan 1982. v. 59 (1). p. 11-15. ill. 10 ref. (NAL Call No.: 307.8 J82).

1736

Membrane-enhanced anaerobic digesters (Example used is an English company that processes wheat flour).

Choate, W.T. PIWCA. Houldsworth, D.; Butler, G.A. Ann Arbor : Ann Arbor Science Publishers. Proceedings of the ... Industrial Waste Conference, Purdue University. 1983. 1983. (37th). p. 661-666. ill. 10 ref. (NAL Call No.: TP995.A115).

1737

Reducing grain dust with oil additives (Treatment of wheat and maize includes insecticide malathion for the control of pests during storage).

Lai, F.S. Miller, B.S.; Martin, C.R.; Storey, C.L.; Boite, L.; Shogren, M.; Finney, K.F.; Quinlan, J.K. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1626-1631. ill. 12 ref. (NAL Call No.: 290.9 AM32T).

1738

Wheat and triticale--a multiple approach for use as a renewable resource (as food, feed, fuel, and a source of chemicals).

Pomeranz, Y. St. Paul, Minn. : American Association of Cereal Chemists, c1981. Cereals, a renewable resource : theory and practice / Y. Pomeranz, Lars Munck, editors. p. 461-469. ill.

FOOD STORAGE, FIELD CROP

1739

Results of a grain storage study in Idaho (Loss in grain quality, *Triticum aestivum*, wheat, *Hordeum vulgare*, barley, insect damage, molds, sprouting, excessive dryness).

Halderson, J.L. Sandvol, L.E. St. Joseph, Mich.
: The Society. Paper - American Society of Agricultural Engineers (Microfiche collection).
1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices.
1982. (fiche no. 82-3012). 1 microfiche : ill.
Includes references. (NAL Call No.: FICHE S-72).

FOOD CONTAMINATION AND TOXICOLOGY

1740

Comparison of low-temperature wheat drying management procedures (5 procedures, energy consumption, grain quality, microorganism, baking quality, germination).
Muhlbauer, W. Stahl, T.; Hofacker, W.; Reisinger, G. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1982. Paper presented at the 1982 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1982. (fiche no. 82-3006). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

1741

Elements in major raw agricultural crops in the United States. 1. Cadmium and lead in lettuce, peanuts, potatoes, soybeans, sweet corn, and wheat.
Wolnik, K.A.JAFCA. Fricke, F.L.; Capar, S.G.; Braude, G.L.; Meyer, M.W. Washington : American Chemical Society. Journal of agricultural and food chemistry. Nov/Dec 1983. v. 31 (6). p. 1240-1244. maps. Includes references. (NAL Call No.: 381 J8223).

1742

Rapid thin layer chromatographic determination of zearalenone in corn, sorghum, and wheat (Fusarium species).
Gimeno, A.JANCA. Arlington : The Association. Journal of the Association of Official Analytical Chemists. May 1983. v. 66 (3). p. 565-569. Includes references. (NAL Call No.: 381 AS7).

1743

Residues of 4-(2,4-dichlorophenoxy)butyric acid in winter wheat (Herbicide).
Leather, G.R. Forrence, L.E. Madison, Wis., American Society of Agronomy. Journal of environmental quality. July/Sept 1982. v. 11 (3). p. 345-346. 7 ref. (NAL Call No.: QH540.J6).

1744

Stored wheat insect infestation related to uric acid as determined by liquid chromatography.
Wehling, R.L. Wetzel, D.L.; Pedersen, J.R. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. May/June 1984. v. 67 (3). p. 644-647. ill. Includes references. (NAL Call No.: 381 AS7).

FOOD CONTAMINATION, FIELD CROP

1745

Comparison of liquid and gas chromatography for the determination of bromoxynil octanoate and benzoylprop ethyl in wheat products (Herbicide residues).

Lawrence, J.F. Panopio, L.G.; McLeod, H.A. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry.* Sept/Oct 1980. v. 28 (5). p. 1019-1022. ill. 10 ref. (NAL Call No.: 381 J8223).

1746

Deoxynivalenol in winter wheat: thin layer chromatographic method and survey (Trichothecenes).

Eppley, R.M. Trucksess, M.W.; Nesheim, S.; Thorpe, C.W.; Wood, G.E. Arlington, Va. : The Association. *Journal of the Association of Official Analytical Chemists.* Jan/Feb 1984. v. 67 (1). p. 43-45. Includes references. (NAL Call No.: 381 AS7).

1747

Determination of aflatoxin B1 in corn, wheat, and peanut butter by enzyme-linked immunosorbent assay and solid phase radioimmunoassay.

El-Nakib, O. Pestka, J.J.; Chu, F.S. Arlington, Va., The Association. *Journal of the Association of Official Analytical Chemists.* Sept 1981. v. 64 (5). p. 1077-1082. ill. 19 ref. (NAL Call No.: 381 AS7).

1748

Determination of internal insect infestation of wheat: collaborative study.

Trauba, R.L. Arlington, Va., The Association. *Journal of the Association of Official Analytical Chemists.* Nov 1981. v. 64 (6). p. 1408-1410. (NAL Call No.: 381 AS7).

1749

Effects of storage temperatures on rate of degradation of fenitrothion in stored wheat (Insecticide, residues).

Abdel-Kadar, M.H.K. Webster, G.R.B.; Loschiavo, S.R. College Park, Md., Entomological Society of America. *Journal of economic entomology.* June 1982. v. 75 (3). p. 422-424. ill. Includes 1 p. ref. (NAL Call No.: 421 J822).

1750

Enzyme-linked immunosorbent assay for T-2 toxin (Wheat flour, maize meal).

Pestka, J.J. Lee, S.C.; Lau, H.P.; Chu, F.S. Champaign, Ill., The Society. *Journal of the American Oil Chemists' Society.* Dec 1981. Presented at the Walter A. Pons, Jr. Memorial

Symposium on Mycotoxins, New Orleans, La., May 19-10, 1981. v. 58 (12). p. 940A-944A. ill. 20 ref. (NAL Call No.: 307.8 J82).

1751

Enzyme-linked immunosorbent assay of ochratoxin A in wheat.

Lee, S.C. Chu, F.S. Arlington, Va. : The Association. *Journal of the Association of Official Analytical Chemists.* Jan/Feb 1984. v. 67 (1). p. 45-49. Includes references. (NAL Call No.: 381 AS7).

1752

Five-year study of mycotoxins in Virginia wheat and dent corn (Aflatoxin, zearelenone, ochratoxin A).

Shotwell, O.L. JANCA. Hesseltine, C.W. Arlington : The Association. *Journal of the Association of Official Analytical Chemists.* Nov 1983. v. 66 (6). p. 1466-1469. Includes references. (NAL Call No.: 381 AS7).

1753

Gas chromatographic determination of deoxynivalenol in wheat (Mycotoxins).

Bennett, G.A. JANCA. Stubblefield, R.D.; Shannon, G.M.; Shotwell, O.L. Arlington : The Association. *Journal of the Association of Official Analytical Chemists.* Nov 1983. v. 66 (6). p. 1478-1480. Includes references. (NAL Call No.: 381 AS7).

1754

Gas chromatography with electron capture and mass spectrometric detection of deoxynivalenol in wheat and other grains (Maize, barley, soybeans).

Scott, P.M. Lau, P.Y.; Kanhere, S.R. Arlington, Va., The Association. *Journal of the Association of Official Analytical Chemists.* Nov 1981. v. 64 (6). p. 1364-1371. ill. 24 ref. (NAL Call No.: 381 AS7).

1755

Increasing total and biologically active chromium in wheat grain and spinach by spraying with chromium salts.

Vicini, F.A. Ellis, B.G. Columbia, Mo., The Conference. *Trace substances in environmental health; proceedings of University of Missouri's ... annual conference.* 1981. v. 15. p. 154-159. Includes 21 ref. (NAL Call No.: RA422.C65).

1756

Method of analysis for deoxynivalenol and zearalenone from cereal grains (Toxins in maize, wheat, oats, rice, and barley).
 Bennett, G.A. Megalla, S.E.; Shotwell, D.L.
 Champaign, Ill. : The Society. Journal of the American Oil Chemists' Society. Sept 1984. v. 61 (9). p. 1449-1451. Includes 10 references. (NAL Call No.: 307.8 J82).

1757

Radioimmunoassay of T-2 toxin in corn and wheat (Zea mays, food hygiene, methods, chemical analysis).
 Lee, S.JANCA. Chu, F.S. Arlington : The Association. Journal of the Association of Official Analytical Chemists. Jan 1981. v. 64 (1). p. 156-161. 18 ref. (NAL Call No.: 381 AS7).

1758

Simple spectrophotometric method for determination of phosphine residues in wheat.
 Rangaswamy, J.R. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1984. v. 67 (1). p. 117-122. Includes references. (NAL Call No.: 381 AS7).

1759

Simultaneous occurrence of deoxynivalenol, zearalenone, and aflatoxin in 1982 scabby wheat from the midwestern United States.
 Hagler, W.M. Jr. APMBA. Tyczkowska, K.; Hamilton, P.B. Washington : American Society for Microbiology. Applied and environmental microbiology. Jan 1984. v. 47 (1). p. 151-154. Includes references. (NAL Call No.: 448.3 AP5).

1760

Spectrophotometric determination of carbaryl in grains (Insecticides, rice, wheat, jowar and pulse).
 Appaiah, K.M. Ramakrishna, R.; Subbarao, K.R.; Kapur, O. Arlington, Va., The Association. Journal of the Association of Official Analytical Chemists. Jan 1982. v. 65 (1). p. 32-34. ill. Includes 5 ref. (NAL Call No.: 381 AS7).

1761

Thin layer chromatographic determination of deoxynivalenol in wheat and corn (Toxic trichothecenes).
 Trucksess, M.W. Nesheim, S.; Eppley, R.M. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1984. v. 67 (1). p. 40-43. Includes

references. (NAL Call No.: 381 AS7).

1762

Toxicological evaluation of Karnal bunt wheat (Neovossia indica).
 Bhat, R.V. JFSAD. Bapu Rao, S.; Roy, D.N.; Vijayaraghavan, M.; Tulpule, P.G. Westport : Food & Nutrition Press. Journal of food safety. 1983. v. 5 (3). p. 105-111. Includes references. (NAL Call No.: TP373.5.J62).

1763

Trapping low levels of methyl bromide in air or as residues at ambient and lower temperatures for gas chromatography (Used for insect control in stored products, wheat).
 Dumas, T. Arlington, Va., The Association. Journal of the Association of Official Analytical Chemists. July 1982. v. 65 (4). p. 913-915. 6 ref. (NAL Call No.: 381 AS7).

FOOD COMPOSITION

1764

Fractionation and chemical characterization of dietary fibre components (Wheat bran, potatoes, carrots, white cabbage).

Theander, O. New York, Plenum. Nutrition and food science; present knowledge and utilization. 1980. v. 2. p. 727-739. (NAL Call No.: TX345.153).

1765

Nutritive value of mixtures using chick-peas with wheat, triticale, normal and opaque-2 corns.

Del-Angel, Alma Rosa. Sotelo, Angela. Bethesda, American Institute of Nutrition. Abstract: Chemical (protein, fat, fiber, ash, carbohydrate, gluten, moisture) and biological (protein efficiency ratio (PER) determinations using experimental rats) evaluation of cereal-legume mixtures prepared with normal or genetically-improved cereals were made. Wheat, triticale, normal corn, opaque-2 soft and hard endosperm corns, and chick-peas were used. It was concluded that mixtures prepared with genetically-improved cereals permit a reduction in the level of legume in the mixtures, maintaining a high protein value while preserving the desirable cereal properties. While the protein content of the normal and improved cereals was similar, the lysine, tryptophan, sulfur amino acids, and leucine in the improved cereals gave a better balance in their protein. The PER results demonstrated that mixtures of improved cereals and chick-peas were statistically different from mixtures formed from normal cereals. Best results were obtained with triticale and hard endosperm opaque-2 corn mixtures. (wz). The Journal of nutrition. Aug 1982. v. 112 (8). p. 1474-1480. charts. 15 ref. (NAL Call No.: 389.8 J82).

FOOD COMPOSITION, FIELD CROP

1766

Analysis of difenzoquat herbicide in wheat products by reversed-phase liquid chromatography.

Lawrence, J.F. Panopio, L.G.; McLeod, H.A. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry.* July/Aug 1981. v. 29 (4). p. 887-889. 8 ref. (NAL Call No.: 381 J8223).

1767

Analysis of volatile compounds in wheat germ oil responsible for an aggregation response in *Trogoderma glabrum* larvae.

Nara, J.M. Lindsay, R.C.; Burkholder, W.E. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry.* Jan/Feb 1981. v. 29 (1). p. 68-72. illl. 16 ref. (NAL Call No.: 381 J8223).

1768

Chemical identity of iron in wheat by Mossbauer spectroscopy.

May, L. AR-BARC. Morris, E.R.; Ellis, R. Washington, D.C., American Chemical Society. *Journal of agricultural and food chemistry.* Sept/Oct 1980. v. 28 (5). p. 1004-1006. illl. 7 ref. (NAL Call No.: 381 J8223).

1769

Effect of nitrogen fertilization on quantity and composition of wheat flour protein.

Doeke, G.J. Wenckes, L.M.J. St. Paul, Minn., American Association of Cereal Chemists. *Cereal chemistry.* July/Aug 1982. v. 59 (4). p. 276-278. illl. 12 ref. (NAL Call No.: 59.8 C33).

1770

The effect of rapeseed oil added to control grain dust on the quality of wheat (Includes barley, oats, rye).

Hsieh, F.H. Daun, J.K.; Tipples, K.H. Champaign, Ill., The Society. *Journal of the American Oil Chemists' Society.* Jan 1982. v. 59 (1). p. 11-15. illl. 10 ref. (NAL Call No.: 307.8 J82).

1771

Effects of stinkbug (*Nezara viridula*, *Oebalus pugnax*) feeding activity on soft red winter wheat quality.

Viator, H.P. Smith, C.M. Baton Rouge, The Department. Report of projects - Louisiana Agricultural Experiment Station, Department of Agronomy. 1980. 1980. p. 38-39. (NAL Call No.: 100 L936).

1772

Establishing relationships of nutrient composition and quality of wheat and triticale grains using chicken, quail, and flour beetle bioassays.

Hilga. Shariff, G. Vohra, P. Qualset, C.O.; Williams, W.A. Berkeley : The Station. Hilgardia - California Agricultural Experiment Station. Nov 1983. v. 51 (4). 11 p. Includes references.

1773

Evaluation of the nutrient composition of wheat. II. Proximate analysis, thiamin, riboflavin, niacin, and pyridoxine (Varieties from 49 growing locations).

Davis, K.R. Cain, R.F.; Peters, L.J.; Le Tourneau, D.; McGinnis, J. St. Paul, Minn., American Association of Cereal Chemists. *Cereal chemistry.* Mar/Apr 1981. v. 58 (2). p. 116-120. 11 ref. (NAL Call No.: 59.8 C33).

1774

Evaluation of the nutrient composition of wheat. III. Minerals.

Davis, K.R. Louis, M.S.; Peters, J.; Cain, R.F.; LeTourneau, D. St. Paul, Minn. : American Association of Cereal Chemists. *Cereal foods world.* Apr 1984. v. 29 (4). p. 246-248. Includes references. (NAL Call No.: 59.8 C333).

1775

Evaluation of the protein quality and available lysine of germinated and fermented cereals.

Hamad, Ahmed M. Fields, M.L. Chicago, Institute of Food Technologists. Extract: Germinated rice, wheat and barley increased significantly in percent Relative Nutrient Value (RNV). The increase in available lysine was highly significant in germinated wheat, barley, oats and rice. Natural lactic acid fermentation increased the percent RNV significantly for wheat, barley, rice, millet and maize. The available lysine content increased significantly in fermented oats rice, millet, and maize, but the available lysine increase was highly significant in fermented wheat. Bo. *Journal of food science.* Mar/Apr 1979. v. 44 (2). p. 456-459. illl., charts. 31 ref.

1776

Further studies on the nutritional evaluation of wheat, triticale, and rice grains using the red flour beetle (*Tribolium castaneum*).

Shariff, G. Vohra, P.; Qualset, C.O. St. Paul, Minn., American Association of Cereal Chemists. *Cereal chemistry.* Mar/Apr 1981. v. 58 (2). p. 86-89. 9 ref. (NAL Call No.: 59.8 C33).

(FOOD COMPOSITION, FIELD CROP)

1777

Influence of N (nitrogen) fertilization on wheat milling and baking quality (Oasis soft red winter wheat, protein content, Georgia). Johnson, J.W. Hargrove, W.L.; Touchton, J.T.; Yamazaki, W.T. Madison, Wis. : Crop Science Society of America. Crop science. Sept/Oct 1984. v. 24 (5). p. 904-906. Includes references. (NAL Call No.: 64.8 C883).

1778

Manganese deficiency and toxicity effects on growth, development, and nutrient composition in wheat (*Triticum aestivum*, Solution culture under greenhouse conditions). Ohki, K. Madison : American Society of Agronomy. Agronomy journal. Mar/Apr 1984. v. 76 (2). p. 213-218. ill. Includes references. (NAL Call No.: 4 AM34P).

1779

Quality control in soft wheat flour. Mansour, K.H. St. Paul, Minn., American Association of Cereal Chemists. Cereal foods world. July 1982. v. 27 (7). p. 315-316. ill. (NAL Call No.: 59.8 C333).

1780

Shear stress relaxation of chemically modified gluten (Wheat flour). Mita, T.CECHA. Bohlin, L. St. Paul : American Association of Cereal Chemists. Cereal chemistry. Mar/Apr 1983. v. 60 (2). p. 93-97. ill. Includes references. (NAL Call No.: 59.8 C33).

FEED PROCESSING AND STORAGE

1781

Chemical treatment of wheat straw (Trials with lambs).

Lesoing, G. Klopfenstein, T.; Rush, I.; Ward, J. Champaign, Ill.; American Society of Animal Science. Journal of animal science. Aug 1980. v. 51 (2). p. 263-269. 18 ref. (NAL Call No.: 49 J82).

1782

The effect of rapeseed oil added to control grain dust on the quality of wheat (Includes barley, oats, rye).

Hsieh, F.H. Daun, J.K.; Tipples, K.H. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Jan 1982. v. 59 (1). p. 11-15. illl. 10 ref. (NAL Call No.: 307.8 J82).

1783

Reducing grain dust with oil additives (Treatment of wheat and maize includes insecticide malathion for the control of pests during storage).

Lai, F.S. Miller, B.S.; Martin, C.R.; Storey, C.L.; Bolte, L.; Shogren, M.; Finney, K.F.; Quinlan, J.K. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Nov/Dec 1981. v. 24 (6). p. 1626-1631. illl. 12 ref. (NAL Call No.: 290.9 AM32T).

1784

Wheat and triticale--a multiple approach for use as a renewable resource (as food, feed, fuel, and a source of chemicals).

Pomeranz, Y. St. Paul, Minn. : American Association of Cereal Chemists, c1981. Cereals, a renewable resource : theory and practice / Y. Pomeranz, Lars Munck, editors. p. 461-469. illl. 2 p. ref. (NAL Call No.: SB188.2.C368).

FEED CONTAMINATION TOXICOLOGY

1785

Deoxynivalenol in winter wheat: thin layer chromatographic method and survey (Trichothecenes).

Eppley, R.M. Trucksess, M.W.; Nesheim, S.; Thorpe, C.W.; Wood, G.E. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1984. v. 67 (1). p. 43-45. Includes references. (NAL Call No.: 381 AS7).

1786

Determination of aflatoxin B1 in corn, wheat, and peanut butter by enzyme-linked immunosorbent assay and solid phase radioimmunoassay.

El-Nakib, O. Pestka, J.J.; Chu, F.S. Arlington, Va., The Association. Journal of the Association of Official Analytical Chemists. Sept 1981. v. 64 (5). p. 1077-1082. ill. 19 ref. (NAL Call No.: 381 AS7).

1787

Effects of feeding vomitoxin contaminated wheat on the performance of broiler chickens (Prince Edward Island).

Hulan, H.W. Proudfoot, F.G. Champaign, Ill., Poultry Science Association. Poultry science. Aug 1982. v. 61 (8). p. 1653-1659. 1 p. ref. (NAL Call No.: 47.8 AM33P).

1788

Enzyme-linked immunosorbent assay for T-2 toxin (Wheat flour, maize meal).

Pestka, J.J. Lee, S.C.; Lau, H.P.; Chu, F.S. Champaign, Ill., The Society. Journal of the American Oil Chemists' Society. Dec 1981. Presented at the Walter A. Pons, Jr. Memorial Symposium on Mycotoxins, New Orleans, La., May 19-10, 1981. v. 58 (12). p. 940A-944A. ill. 20 ref. (NAL Call No.: 307.8 J82).

1789

Enzyme-linked immunosorbent assay of ochratoxin A in wheat.

Lee, S.C. Chu, F.S. Arlington, Va. : The Association. Journal of the Association of Official Analytical Chemists. Jan/Feb 1984. v. 67 (1). p. 45-49. Includes references. (NAL Call No.: 381 AS7).

1790

Feeding trials with vomitoxin (deoxynivalenol)-contaminated wheat: effects on swine, poultry, and dairy cattle (Toxicity, residues).

Trenholm, H.L. Hamilton, R.M.G.; Friend, D.W.; Thompson, B.K.; Hartin, K.E. Schaumburg, Ill. :

The Association. Journal of the American Veterinary Medical Association. Sept 1, 1984. v. 185 (5). p. 527-531. ill. Includes 27 references. (NAL Call No.: 41.8 AM3).

1791

Five-year study of mycotoxins in Virginia wheat and dent corn (Aflatoxin, zearelenone, ochratoxin A).

Shotwell, O.L. JANCA. Hesseltine, C.W. Arlington : The Association. Journal of the Association of Official Analytical Chemists. Nov 1983. v. 66 (6). p. 1466-1469. Includes references. (NAL Call No.: 381 AS7).

1792

Gas chromatographic determination of deoxynivalenol in wheat (Mycotoxins).

Bennett, G.A. JANCA. Stubblefield, R.D.; Shannon, G.M.; Shotwell, O.L. Arlington : The Association. Journal of the Association of Official Analytical Chemists. Nov 1983. v. 66 (6). p. 1478-1480. Includes references. (NAL Call No.: 381 AS7).

1793

Gas chromatography with electron capture and mass spectrometric detection of deoxynivalenol in wheat and other grains (Maize, barley, soybeans).

Scott, P.M. Lau, P.Y.; Kanhere, S.R. Arlington, Va., The Association. Journal of the Association of Official Analytical Chemists. Nov 1981. v. 64 (6). p. 1364-1371. ill. 24 ref. (NAL Call No.: 381 AS7).

1794

Liver lipid levels in White Leghorn hens fed diets that contained wheat contaminated by deoxynivalenol (Vomitoxin).

Farnworth, E.R. POSCA. Hamilton, R.M.G.; Thompson, B.K.; Trenholm, H.L. Champaign : Poultry Science Association. Poultry science. May 1983. v. 62 (5). p. 832-836. Includes references. (NAL Call No.: 47.8 AM33P).

1795

Rapid screening method for zearalenone in corn, wheat and sorghum.

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AUTHOR INDEX

- Aase, J.K. 393, 402, 1181
Abdallah, Mounir Ibrahim Ali,.. 941
Abdel-Kadar, M.H.K. 1749, 1440
Abdel-Kader, M.H.K. 1257, 1423, 1291, 1451
Abou-Zamzam, A.M. 1165
Acock, B. 1714, 1728
ACSMC. 437, 1222, 1393, 772
Adams, E.B. 741, 1082, 743, 700, 1083, 744, 739
Adams, H.P. 129, 1804
Adams, R.S. Jr. 149, 1383
AECTCV. 1717, 1427, 1502, 1461, 1818
AESAA. 576, 277
Agamennoni, R. 111, 327, 1185
Agee, D.E. 103, 1528, 102, 1527
AGJOA. 367, 151, 9, 124, 1192, 85, 308, 1177,
127, 1194, 321, 101, 1161, 167, 1670, 1400,
340, 1563, 1164, 106, 322, 1531, 139, 1206,
1805, 8, 97, 1183
AGJODAT. 105, 1653, 1530, 392, 1174
Akesson, N.B. 451, 1334
AKFRA. 1610
Al-Mousawi, A.H. 576, 277
Alcock, K.T. 747, 674
Alessi, J. 1547
Alexander, H.M. 981
Ali, M.B. 44, 38, 1825
Allan, C.R. 1080
Allan, R.E. 96, 201, 764, 440, 273, 468
Allen, J.V. 302, 1040
Allingham, E.A. 1086
Allmaras, R.R. 1523, 1580, 1614, 1485
Alnaji, L.K. 51, 1435
Alvarez, R. 1248, 60
Amos, T.G. 1290
Amy, D.C. 1028
Anahosur, K.H. 628
Anaya, Manuel. 410, 1555
Anderegg, B. N. 1437, 1271
Anderegg, B.N. 769, 1433, 1270
Andersen, Axel Langrad,. 479
Andersen, Lloyd W. 1118
Anderson, D.E. 41
Anderson, I.C. 392, 1174, 1189
Anderson, J.L. 1634, 1708, 1802
Anderson, M.G. 714
Anderson, R.L. 1316, 1650, 1464, 1819, 1218
Andrews, C.J. 473, 303, 461, 472
Aniol, A. 423
Ansari, R. 345
Antonelli, A.L. 534, 537
Anzalone, L. Jr. 694, 881, 890
APMBA. 1759, 1798
Appiah, K.M. 1473, 1760
Appleby, A.P. 1390, 1468
Archer, S.A. 644, 188
Armitage, C.R. 671
Arnold, D.C. 514
Arnold, W. E. 1320
Arnold, Willie Eugene,. 406, 297, 1436
Arny, D.C. 1030, 1062, 1027, 1029
Arscott, T.G. 1562
Asavanich, A.P. 507
Ashagari, D. 992
Ashley, D. 456, 338
Atalay, A. 412, 1561
Aujsia, S.S. 701
Aujsia, S.S. 652
Ayers, J.E. 666, 1031, 842, 1032, 238, 948
Babadoost, M. 871, 927, 1246
Babineau, D.E. 838
Babowicz, R.J. 1658, 1568
Bache, C.A. 1802, 1634, 1708
Backus, W.W. 726
Baco, P.E. 1578, 1499
Baenziger, P.S. 228, 917, 270, 1020, 813, 1242
Baer, G.R. 421
Bagby, M.O. 1724
Baghott, K. 1417
Bailey, J.E. 930
Bajeer, M.U. 882, 668
Baker, F.D. 956
Baker, F.L. 1724
Baker, John Milton,. 328
Ballinger, D.J. 746, 793, 794, 797, 748, 756,
795, 673
Banks, P.A. 1346, 1347, 1322
Banowetz, G.M. 921
Bapu Rao, S. 1762, 1072
Barak, A.V. 1287
Barbarick, K.A. 87, 1510
Barel, D. 74, 1243, 1572
Barker, K.R. 16, 601
Barker, P.S. 1262
Barnett, R.D. 877
Barnhart, D. 190
Barrett, M.R. 1819, 1464, 1218
Barry, C. 1363, 1447
Bartels, P.G. 1182, 1432
Baskett, T.S. 1717, 1427
Bassi, A. 893
Bateman, C. 292, 1211
Bates, L.S. 220, 299
Bauder, J.W. 1586, 1727
Bauer, A. 113, 288, 1543
Bauman, Thomas T. 100, 1652
Bayer, D.E. 1182, 1432
BCPFA. 372, 1609
Beaver, Richard Gary,. 934
Becker, Roger. 1456
Beckerman, S. 1065
Bedi, P.S. 860, 804, 774, 773
Beeman, R.W. 1304, 1474, 1292
Behrens, R. 1387, 1349, 1467, 1219
Ben-Ghedalia, D. 1699
Bender, C.G. 498, 1117
Bennett, G.A. 1756, 1792, 1753
Berardi, G. 1722, 1559
Berger, P. 1156
Berger, P.H. 1154
Bergman, Jerald Wilmer. 1835, 1838
Beyermann, K. 1442, 1704
Bhat, R.V. 1072, 1762
Bhatia, B.K. 355, 1500
BIGEB. 218, 416
Bingham, F.T. 1197, 1574, 1726, 455, 1549
Bishnoi, K.C. 1641
Bishnoi, U.R. 112, 1541
Bitzer, M.J. 144, 1590

AUTHOR INDEX

- Black, A.L. 290, 427, 1582, 138, 1581, 160, 1624
 Blackshaw, R.E. 1345, 1367
 Blair, A.M. 460
 Blanchard, R.W. 412, 1561
 Blansky, R.H. 1142
 Bloom, P.D. 1236, 1261
 Blunden, C.A. 1465
 Boatwright, Glennis Owen, 329, 1483
 Bockus, W.W. 798, 260, 1138, 1008, 807, 665, 999
 Boffey, S.A. 399
 Bogle, T. Roy. 1663
 Bohlin, L. 1780
 Bole, J.B. 309, 394
 Bolte, L. 1299, 1783, 1737
 Bolte, L.C. 1302
 Bolton, F.E. 327, 111, 1185, 115, 1545, 1616, 1503
 Bond, E.J. 1294, 465, 1460
 Boosalis, M.G. 1099, 1016, 1113, 1092, 646
 Boosalis, Michael G. 1024
 Bequet, D.J. 257, 148, 984
 BOREA. 960
 Borges, O. 667
 Borlaug, N.E. 262, 615
 Borowy, A. 469, 1471
 Boswell, F.C. 95, 319, 1522, 105, 1653, 1530, 1631
 Bovey, R.W. 1226, 1472
 Bowen, K.L. 248, 974
 Bowen, W.R. 544
 Boyd, W.S. 1832, 1052
 Brakke, M. K. 1143
 Brakke, M.K. 1153, 1126
 Brandon, D.M. 1622, 1667, 1539
 Brann, D.E. 839
 Braude, G.L. 411, 1741
 Brewster, B.D. 1468, 1390
 Brinkman, M.A. 275, 161, 1051, 1388
 Brooks, Leroy. 590, 1480, 591, 1481
 Broscious, S.C. 935, 708, 1031, 707, 712
 Browder, L.E. 826, 1067, 274, 1048, 198, 670, 800, 1049
 Brown, B.D. 1633
 Brown, C.M. 506, 776, 1123, 510, 1125, 207, 1122, 73, 1571, 386, 281
 Brown, D.F. 1446, 1713, 1813
 Brown, J.S. 740, 653
 Brown, J.W.S. 199
 Brown, L. 597
 Brown, P.M. 1465
 Brown, R.H. 596, 592
 Brownell, K.H. 924
 Bruce, W.A. 1733, 1265
 Bruchi, G.W. 301, 1023
 Bruehl, G. W. 997
 Bruehl, G.W. 806, 672, 222, 905, 206, 775, 737, 923, 444, 203, 765, 932, 1007, 227, 916
 Bryan, R.N. 436
 Buchenau, G.W. 735
 Buchholz, C. 715
 Buechley, G. 751, 1102, 679
 Buehley, G. 752
 Bunyan, P.J. 1424, 1465
 Burkholder, W.E. 1285, 1298, 1767, 1258
 Burleigh, J.R. 989
 Burmester, C.H. 1630
 Burnside, K.R. 1355
 Burnside, O.C. 1429, 1179, 167, 1670, 1400, 168, 1671, 1401, 128, 1357, 1324, 1332
 Burt, O.R. 42, 1829, 40, 1677
 Burton, R.L. 576, 277, 538
 Burton, V.E. 544
 Busch, R. 357
 Busch, R.H. 998, 261, 904, 219
 Bushuk, W. 64
 Butler, G.A. 1736, 1816
 Butler, J.P. 140, 1583
 Buzicky, G. 91, 314, 1516
 Byars, Luther P. 594
 Byers, Robert Allan, 572, 1691
 Cabrera, M.L. 147, 362
 CAGRA. 165, 1822, 1731
 Cain, R.F. 1774, 212, 1773
 Caine, D.T. 1030, 1027, 1029, 1028
 Callihan, R.H. 1418
 Camargo, C.E.O. 255, 1210
 Campbell, C.A. 70, 331, 69, 330
 Campbell, R. 304, 1077, 1112
 Campbell, W.F. 1507, 1808
 Camper, H.M. Jr. 265, 464
 Cannell, R.Q. 72
 Canvin, D.T. 426
 Capar, S.G. 411, 1741
 Capinera, J.L. 566
 Carbonero, P. 193
 Carlson, H. 1417
 Carlson, K.L. 1179, 1429
 Carlson, R.R. 1106
 Carlson, S.K. 543, 233
 Carrigan, L.L. 1116, 1141
 Carroll, T.W. 1142
 Carter, G.A. 958
 Cartwright, W. B. 584, 1693, 1101
 Cary, E.E. 405, 1529
 CASBA. 1316, 1650
 Casper, D.H. 1005, 1003, 1004
 Cates, H. R. 1379
 Cayley, G.R. 801
 CECHA. 1780
 Cessna, A.J. 1225, 1470
 Chakravorty, A.K. 395, 649
 Chamberlin, T. R. 580
 Chambers, A.Y. 856, 908, 831, 865, 841, 693, 811, 840, 854, 879
 Chang, A.C. 1726, 1197, 1574
 Chang, Ho-Shii, 788
 Chapman, C. 625
 Chedester, L.D. 530, 587, 523
 Chen, B.H. 513
 Cheng, H.H. 1648, 1486, 1511
 Cherney, J.H. 439, 1703, 438, 1702
 Chet, I. 639
 Chevalier, P. 422, 1166
 Chhabra, R. 68, 1533
 Ching, T.M. 295, 1238
 Chinn, S.H.F. 938
 Chnibba, I.M. 317, 1519
 Choate, W.T. 1736, 1816
 Cholick, Fred. 183, 487
 Chow, P.N.P. 1359
 Chowdhury, A. 28, 19
 Christen, A.A. 227, 916
 Christensen, N.W. 661, 342, 874, 339, 657, 398, 660, 1636, 1732, 659
 Christensen, N.W. 662
 Chu, F.S. 1789, 1751, 1757, 1788, 1750, 1786, 1747
 Churchill, A.C.L. 1035
 Churchill, K. 1348
 Ciha, A.J. 1191
 Cisar, G. 510, 1125, 207, 1122
 Clark, F. E. 870
 Clark, L.E. 785
 Claypool, D. 129, 1804

AUTHOR INDEX

- Clayton, J.L. 978, 146
 Cleary, C.L. 1343
 Cleveland, W.L. 54
 Clinton, W. 859
 Clover, M. Jr. 1455
 Coakley, S.M. 1832, 1052, 1001
 Coates-Beckford, P.L. 598
 Cochran, V.L. 443, 1639, 1514
 Cochrane, W.P. 1799
 Cohen, A.S. 1365, 1202
 Cohen, H. 1799
 Cole, H. Jr. 935, 708, 732, 666, 1031, 731, 707, 842, 712, 713, 817, 816, 711, 706, 1032, 705, 710, 897, 1132
 Cole, R.J. 648, 1712
 Collet, G.F. 421
 Collins, F.C. 1307, 844, 1037, 1094, 796, 892, 868, 1093, 164, 1632
 Cook, J. 1064
 Cook, R.J. 928, 1011, 872, 617, 1059, 825, 737, 326, 790, 802, 898, 869, 959
 Cope, J.T. 1521
 Copeland, L. O. 155
 Corbin, F.T. 413, 1352
 Counce, P.A. 1610
 Courtney, K.D. 912
 Cowley, C.R. 241, 953
 Cox, D.J. 267, 1014
 Cox, F.R. 340, 1563, 1164
 Cox, R.H. 648, 1712
 Cox, Walter Jacob.. 409, 1488
 Crawford, D.V. 361, 1599, 360, 1598
 Cress, Donald Chauncey.. 477, 1698, 1688
 Croissant, R.L. 143, 1588
 Cros, D.L. du. 1163
 Crowley, J. 1340
 CRPSA. 1116, 494, 192, 252, 1169, 202, 501, 627, 179, 235, 945
 CRPSAY. 264, 563, 263, 562, 513, 234, 1135
 Crumley, F.G. 648, 1712
 Crumrine, Martin H... 567, 1110
 CSOSA. 317, 1519, 401, 316, 1824, 1562
 Cubeta, M.A. 1034
 Cudney, D.W. 293, 1399, 356, 463, 1585
 Culot, J.P. 159, 1621
 Cunfer, B.M. 1038, 368, 1606, 812, 1553
 Cunningham, G.A. 78, 1730, 1613
 Cunningham, R.L. 1724
 Cure, W.W. 1809
 Cutler, H.G. 648, 1712
 D'Appolonia, B.L. 1247, 61, 1253
 Dabney, S.M. 132, 1660, 1201
 Dahnke, W.C. 429, 253, 1600
 Daniels, N.E. 551, 530, 587, 531
 Danon, T. 1015
 Datnoff, L.E. 1034
 Daun, J.K. 1782, 1770, 1735
 Davidson, H.R. 70, 331, 69, 330
 Davidson, L.I. 1296
 Davis, C.D. 32, 1237
 Davis, D.G. 1431, 1180
 Davis, J.R. 1610
 Davis, K.R. 1774, 212, 1773
 Davis, R. 1283
 Dawson, H.V. 757
 De La Roche, A.I. 458, 350
 Deckard, E.L. 189
 Del-Angel, Alma Rosa. 1765
 DeLuca, A.J. II. 1478
 Demianyk, C.J. 1272
 DeMooy, C.J. 114, 1655, 1544
 DePew, L.J. 519, 554
 Desmarchelier, J.M. 1452, 1293
 Detroy, R.W. 1724
 Devitt, D. 435, 1220
 Devlin, R.M. 353, 1366, 282
 Dewey, Lyster H. 1392
 Di Stefano, D.L. 436
 Diaz, R.A. 9, 124, 1192
 Dicke, E.B. 1302
 Dickerson, J.D. 174, 1506, 1682
 Diehle, D.A. 256, 980
 Dixon, A.F.G. 296, 508
 Doane, J.F. 504, 568
 Dobranski, A. 1229, 1475
 Dobrzanski, A. 475, 1410
 Doeke, G.J. 1537, 1769
 Dolbeer, R.A. 470
 Dolezal, W.E. 1037, 1094, 796, 892, 868, 1093, 894, 1060
 Dondale, C.D. 568
 Dorn, E. 1704, 1442
 Dorner, J.W. 648, 1712
 Dorschner, K.W. 565
 Doster, D. Howard. 100, 1652
 Douglas, C.L. Jr. 1493, 1628, 1485, 1614
 Doupnik, B. 1016
 Doupnik, B. Jr. 651, 858, 1025
 Doupnik, B.L. Jr. 1099, 884
 Downs, H.W. 1354
 Dryden, R.D. 323, 1337
 Dubbs, A. 915, 612
 Dube, A.J. 606, 599
 Dubetz, S. 432, 1605, 1241, 1538
 Dubin, H.J. 447, 196
 Dumas, T. 1763, 1457, 465, 1460
 Dunkle, Larry Don,. 985
 Duquette, P.F. 1710
 Duran, R. 294, 767, 1080
 Durand, R. 1146
 Dusky, J.A. 1431, 1180
 Dyck, P.L. 214, 899, 229, 920, 177, 623
 Eaton, D.L. 261, 998
 Eberlein, C.V. 1387
 Echools, J.S. 143, 1588
 Echools, J.W. 150, 1601
 Ecker, O. 1288, 1245
 Edge, B. III. 733
 Edwards, I.B. 1444, 1196, 381, 1395
 Edwards, N.C. 855, 123, 832, 754, 655, 120, 1551, 121, 1552
 Edwards, Richard. 100, 1652
 Ehmk, V. 1317, 1643
 Eichers, T.R. 18, 21, 457
 Eikenbary, R.D. 565
 Einhellig, F.A. 1306
 El-Morshidy, M.A. 270, 1020
 El-Nakib, O. 1786, 1747
 Ellett, C. Wayne. 875
 Ellingboe, A.H. 990, 258, 929, 217, 901
 Elliot, J.I. 1799
 Elliott, L.F. 443, 1639, 1514
 Elliott, V.J. 778
 Ellis, B.G. 1755, 1814
 Ellis, R. 1768
 Eppley, R.M. 1746, 1785, 1800, 1761
 Epplin, F. 39
 Epplin, F.M. 30, 36
 Erickson, J.R. 259, 1212
 Erickson, P.I. 346
 Erlandson, G.W. 41
 Eustice, D.C. 1224
 Evans-Ruhl, G. 610
 Evans, S. 357
 Evans, S.D. 92, 315, 1517, 157, 1619, 1505, 379, 158, 1620

AUTHOR INDEX

- Eversmeyer, M.G. 826, 1067, 274, 1048, 800,
 914, 1049
 Eversmeyer, Merle Gideon, . 1088
 EVETB. 484, 565, 1285
 Eyal, Z. 180, 631, 629, 1015, 955, 240, 950,
 246, 968
 Fahey, R.C. 436
 Fain, D. 1313, 1380
 Fain, D.M. 1354
 Fales, S.L. 139, 1805, 1206
 Farison, Richard Ballard. 1508
 Farnsworth, E.R. 1706, 1794, 1701, 1799
 Farooqi, M.A.R. 114, 1544, 1655
 Fast, S. 1722, 1559
 Faull, J.L. 304, 1077, 1112
 Fay, P. 1386, 94, 1325
 Fedak, G. 215
 Fenster, C.R. 1324, 1375
 Fenster, Charles R. 1398, 1308
 Fenster, W.E. 92, 315, 1517, 91, 314, 1516
 Fenster, William E. 1569
 Ferguson, M.W. 1155
 Fernandez, J.A. 647, 645
 Fields, M.L. 1775
 Fine, Richard Ray, . 1449
 Finkner, R.E. 80, 380, 1623
 Finney, K.F. 1299, 1783, 1737, 1302
 Finney, R.E. 760, 678, 750, 759, 677, 749, 758,
 676, 755, 699, 1019, 975
 Fischer, V. 1565, 1566
 Fisher, G.C. 582
 Fisher, J.M. 606, 599
 Flavell, R.B. 199
 Fleige, H. 343, 1570
 Fleming, A.L. 85, 308, 1177, 391, 1173, 1158
 Flom, D.G. 1394
 FNEDT. 1021, 833, 651, 698, 859, 838, 860, 804,
 774, 773, 751, 835, 856, 908, 742, 839, 851,
 1041, 876, 741, 1082, 885, 746, 895, 883, 625,
 935, 855, 878, 708, 732, 1102, 752, 679, 715,
 735, 694, 714, 1033, 848, 730, 757, 831, 728,
 692, 743, 700, 864, 729, 723, 688, 843, 734,
 1008, 793, 794, 1030, 596
 Follett, R.H. 150, 1601, 143, 1588, 145, 1592
 Follette, R.H. 87, 1510
 Formoli, G.N. 1548
 Forrence, L.E. 1466, 1743
 Forsberg, R.A. 275, 161, 1051
 Forster, D.L. 43, 1830
 Foster, G.R. 1679, 1678
 Foster, J.E. 553, 263, 562, 1136, 513, 511,
 1116, 1141, 573
 Foster, R.N. 483
 Fouts, M.L. 164, 1632
 Fowler, D.B. 8, 97, 1183, 126, 1564
 Fox, C.A. 165, 1731, 1822
 Foy, C.D. 391, 1173, 1158
 Foy, C.L. 1190
 Francki, R.I.B. 555, 291
 Frank J. 731
 Frank, A.B. 113, 288, 1543
 Frank, J.A. 935, 708, 732, 666, 1031, 707, 842,
 712, 713, 817, 816, 711, 706, 705, 710
 Frans, R.E. 1414
 Fredrickson, J.K. 1648, 1511, 1486
 Fredrickson, M.K. 351, 1815, 1498
 Freed, R.D. 558, 991
 French, E.W. 1649, 1315
 Freyman, S. 1344
 FRHQA. 1099, 1016
 Fricke, F.L. 411, 1741
 Friend, D.W. 1790, 1700, 1705, 1799
 Fuehring, H.D. 80, 380, 1623
 Fulbright, D. W. 1152
 Fulbright, D.W. 271, 1026, 146, 978
 Fulk, D. 1733, 1265
 Fulk, D.W. 1288, 1245
 Fullington, J.G. 1163
 Gabriel, D.W. 258, 990, 929
 Gage, S.H. 561
 Gallagher, L.W. 245
 Gallaher, R.N. 1577, 1661
 Gallum, R.L. 562, 263
 Gallun, R.L. 194, 495, 547, 244, 573, 186, 490,
 546, 243, 518, 507
 Gamzikov, G.P. 197
 Gamzikova, O.I. 197
 Gandhi, S.M. 907, 224
 Garcia-Olmedo, F. 193
 Gardenhire, J.H. 488, 184
 Gardiner, E.E. 432, 1605, 1241, 1538
 Gardner, H. 341, 1659
 Gardner, J.S. 302, 1040
 Gardner, W.A. 553
 Gardner, W.S. 1156, 1144, 1121
 Garnick, Bradley. 34
 GARRA. 1346, 1347
 Gasztoni, M. 621
 Gates, C.E. 223, 906
 Gates, D. 545
 Gates, Dell E. 590, 1480, 591, 1481
 Gaudet, D.A. 630
 Gealy, D.R. 1342
 GENSA. 1286
 GENSA. 553
 GENTA. 190
 Gerling, J.F. 1354
 Ghadiri, H. 1372, 1324
 Ghaffar, A. 107, 1654, 1339
 Gilchrist, D.G. 924
 Gile, J.D. 1818, 1461, 1502
 Gill, B.S. 502, 204
 Gill, C.C. 1115
 Gillenwater, H.B. 1283
 Gilligan, C.A. 1833, 1068
 Gilmore, E.C. 187, 609
 Gilstrap, F.E. 520, 589, 557
 Gimeno, A. 1742, 1796
 Girdhar, I.K. 109, 1729
 Giunchedi, L. 577, 1150, 1694
 Glazer, M. 496
 Glenn, M. 1535
 Goates, B.J. 1045
 Goel, L.B. 250, 977
 Gold, R.E. 305, 1078
 Gooden, D.T. 154, 272
 Goos, R.J. 387, 1638, 1536, 418, 1573, 76, 1589
 Goris, J.E. 418, 1573
 Gough, F.J. 946, 236, 1039
 Gould, J.M. 396, 1683
 Grabouski, P.H. 337, 1558, 141, 1584
 Graff, T. 357
 Graham, J.H. 940, 1489
 Graham, J.P. 72
 Graham, R.D. 403, 1160
 Graham, W.D. 895
 Graham, W.D. Jr. 733
 Grant, M.W. 188, 644
 Grau, C.R. 1062
 Grava, J. 1569, 92, 315, 1517
 Graves, C.R. 172, 1637
 Graves, Charles R. 79
 Greb, Bentley W. 1398
 Green, G.J. 1054, 214, 899, 969
 Greer, H. 1313, 1413
 Gregory, L.V. 1031, 1032

AUTHOR INDEX

- Gregory, P.J. 361, 1599, 360, 1598
 Grewal, A.S. 652, 701
 Griffin, G.D. 452
 Griffin, J.L. 148, 984, 257, 1622, 1667, 1539
 Griffin, R.P. 154, 272
 Griffith, D.R. 515
 Grimme, H. 343, 1570
 Gross, D. 1378
 Groth, J.V. 981, 669
 Grube, A.H. 23, 24
 Grube, M. 133, 922, 1828
 Grunes, D.L. 397, 1711
 Gudauskas, R. 625
 Gudauskas, R.T. 1063
 Gumpf, David J. 1140
 Gunjal, K.R. 22, 1826
 Gurner, P. 599
 Gusta, L.V. 126, 1564
 Gustafson, G.D. 937
 Gutenmann, W.H. 1708, 1802, 1634
 Habetz, R.J. 1622, 1667
 Hadar, Y. 639
 Hagan, A. 625
 Hagan, A.K. 1063
 Hageman, L.H. 1219, 1467
 Hagemann, M.G. 1191
 Hagen, Arthur F. 602
 Hagler, W.M. Jr. 1759, 1798
 Hairston, J.E. 99, 1525, 116, 1546, 335, 118, 1656
 Halderson, J.L. 1252, 1739, 1301
 Haliscak, J.P. 1474, 1304
 Halling, B.P. 1349
 Hallmark, W.B. 148, 984, 257
 Halsey, M.E. 742, 843, 633, 634, 1512
 Halstead, E.H. 1441, 1188
 Halvorson, A.D. 138, 1581, 160, 1624
 Halvorson, A.R. 349, 1576
 Hamad, Ahmed M. 1775
 Hamilton, P.B. 1798, 1759
 Hamilton, R.M.G. 1700, 1790, 1705, 1794, 1706, 1701, 1799
 Hamman, W.M. 1353, 1344
 Hammond, J.J. 189
 Hammond, R.B. 484
 Hampton, J.G. 454
 Hancock, T.W. 606, 599
 Handa, S.K. 1428
 Handke, S.J. 30, 36
 Hanks, R.J. 9, 124, 1192
 Hannan, M.A. 1562
 Hannaway, D.B. 129, 1804
 Hansing, E.D. 702, 682
 Harder, D.E. 823, 824, 822
 Harder, R.W. 134, 926
 Harein, P.K. 1287
 Hargrove, W.L. 352, 1777, 95, 319, 1522, 105, 1653, 1530, 367, 151, 1631, 1577, 1661
 Harrold, R.L. 429, 253, 1600
 Hart, G.E. 218, 416
 Hart, L.P. 1152
 Hart, L.P. 786, 146, 978
 Hartin, K.E. 1790, 1700, 1705
 Harvey, R.G. 1388
 Harvey, T.L. 498, 1117, 202, 501, 564, 1128, 499, 1120
 Hatchett, J.H. 563, 264, 208, 505, 534, 11, 276, 574, 522, 204, 502, 538
 Hatley, E.O. 713, 711, 706
 Hatta, T. 291, 555
 Haufler, K. Z. 1152
 Hayes, J.C. 116, 1546
 Hayes, R.M. 1402
 Haywood, M.J. 901, 217
 Haywood, Mary Joy., 903
 Heady, E.O. 29, 1827, 28, 19, 22, 1826
 Heagle, A.S. 1809
 Hebert, T.T. 871, 927, 1246, 1087, 211, 861
 Heck, W.W. 1809
 Heggestad, H.E. 1809
 Hein, H. Jr. 1472, 1226
 Henderson, L.P. 1274
 Henderson, R.L. 1616, 1503
 Hendricks, L.T. 1070
 Henning, S.J. 1189
 Henning, Stanley John. 1175
 Henry, J.E. 483
 Henson, J.F. 252, 1169, 1415
 Hermanson, R.E. 1668, 1715, 1626
 Herr, L.J. 829
 Herrman, T. 133, 922, 1828
 Hess, F.D. 1432, 1182
 Hess, W.M. 302, 1040, 821, 298
 Hesseltine, C.W. 1752, 1791, 59
 Heyne, E.G. 127, 1194, 10, 1227, 1129
 Heyns, A.J. 958
 HILGA. 1772
 Hill, J. 1417
 Hill, J.E. 1405
 Hill, J.P. 1000, 1133
 Hill, K.W. 190
 Hill, L.V. 1322
 Hills, D.J. 1723, 1817
 Hinesly, T.D. 53, 453, 1540
 Hinman, H.R. 31, 1674, 1651
 Hirannaiah, B.V. 1249, 1295
 Hodges, H.F. 1714, 1728
 Hoefer, R.H. 128, 1357
 Hofacker, W. 1740, 1721, 1734
 Hoffman, J.A. 688, 643, 656
 Hoffmann, J.A. 723, 687, 722, 719, 686, 718, 721, 685, 720, 717, 1045
 Holaday, C.E. 1795
 Holcomb, G.E. 967
 Hollenhorst, M.M. 192, 494
 Holtzer, T.O. 571, 1831, 586
 Homma, Y. 983
 Hood, E. L. 1168
 Hooker, M.L. 337, 1558, 141, 1584
 Hope, H.J. 434, 1216
 Hopp, Allan Dale. 614
 Horn, F.P. 397, 1711, 63, 1477
 Horn, G.W. 63, 1477
 Horn, N.L. 777
 Horton, G.M.J. 1697
 Hosford, R.M. Jr. 1114, 1075
 Hough, H.W. 103, 1528, 102, 1527, 1526
 Houldsworth, D. 1816, 1736
 Hovermale, C.H. 820
 Hoxie, R.P. 541
 Hsieh, F.H. 1782, 1735, 1770
 Huang, G. 1172
 Huber, D.M. 925, 373, 616
 Huddleston, R.L. 1821, 1230
 Huebner, F.R. 1806, 1234
 Huffaker, R.C. 245
 Hulan, H.W. 1787
 Humphrey, Harry B. 1873. 1061
 Hutchinson, R.L. 257, 148, 984
 Hyde, G.M. 1658, 1568, 1715, 1626, 1668
 Ibrahim, Y. 61, 1253
 Idso, S.B. 7, 1178
 Igbokwe, P. 112, 1541
 Imbriani, J.L. 16, 601
 Iqbal, M.M. 107, 1339, 1654
 Irwin, R.D. 883

AUTHOR INDEX

- Ishizaki, H. 766
 Jabara, C.L. 47
 Jackson, L.F. 1086
 Jackson, R.D. 7, 1178
 Jackson, T.L. 662, 661, 398, 657, 660, 659, 634, 1512
 Jacobs, D. 222, 905
 Jacobson, A. 428, 1453
 JAFCA. 411, 1741, 1270
 JAFCAU. 1454, 1207
 Jagirdar, H.A. 882, 792, 668, 697
 Jain, R. 224, 907
 JANCA. 1753, 1792, 1791, 1752, 1796, 1742, 1799, 1757
 Jarratt, J.H. 527
 Jarrell, W.M. 435, 1220
 JCECD. 424, 1203, 1369
 Jedlinski, H. 510, 1125, 207, 1122
 JEENA. 1437, 1271, 1268, 521, 1276, 769, 1433, 1304, 1474, 11, 574, 276, 991, 558, 1288, 1283, 1279, 1292
 JEENAI. 1277, 503, 1439, 1275, 1289, 511
 Jeffers, D.L. 484
 Jeffery, L.S. 1402
 Jenkins, J.N. 185, 489
 JEVQA. 1507, 1808
 JEVQAA. 1464, 1819, 1218, 351, 1498, 1815
 JFSAD. 1072, 1762
 JKESA. 520, 534
 Jobes, R. 39
 Johnen, B.G. 467, 1484
 Johnson, B.E. 153, 1612, 1595
 Johnson, C.B. 1679, 1678
 Johnson, D.A. 789, 187, 609, 785
 Johnson, Edward C. 1044
 Johnson, J. 835
 Johnson, J.A. 1424
 Johnson, J.W. 553, 352, 1777, 151, 367, 368, 1606, 812, 1553, 813, 1242
 Johnson, M.W. 586
 Johnson, Marlin O. 1569
 Johnson, R. 1046, 1834, 1047, 779, 209
 Johnson, R.G. 44, 37, 38, 1825
 Johnson, R.R. 281, 386
 Johnson, T.B. 515
 Johnston, A.E. 1556
 Johnston, C. O. 963
 Johnston, H.W. 753, 71
 Johnston, R. 1313
 Johnston, R.H. 864, 729, 725, 724, 803, 683, 684, 680, 805, 1009, 768, 1482
 Jokela, W. 358, 365, 1603
 Jokela, W.E. 318, 1159, 1520, 91, 314, 1516, 158, 379, 1620
 Jokels, W.E. 176, 390
 Jones, A.J. 359, 1596, 1664
 Jones, A.L. 810
 Jones, B.L. 193
 Jones, C.A. 1615, 1491
 Jones, D.A. 951
 Jones, H.C. 1811, 1186
 Jones, H.G. 526, 225
 Jones, J.B. 815, 1108
 Jones, J.P. 844, 893, 1037, 1094, 796, 892, 868, 1093, 894, 1060, 1633, 1597
 Jones, M.G. 482, 1686
 Jones, R.D. 1286
 Jons, V. 1137
 Jons, V.L. 512, 1127, 1156
 Joppa, L.R. 192, 494, 189, 283, 1084, 542, 232
 Jordan, L. 842
 Jordan, L.J. 708, 732, 731, 707, 712
 Jordan, L.S. 1415
 Jose, H.D. 310, 1513
 Josefovits, G. 621
 Joshi, L.M. 972, 960
 JPNUD. 391, 1173, 1158
 JSWCA. 36, 27, 1676, 1657
 Juhnke, M.E. 459, 136, 1036
 JULRA. 1134
 Jury, W.A. 165, 1731, 1822
 Kadoum, A.M. 51, 1435, 449, 1264
 Kaeberg, P. 1148
 Kahl, R.B. 125, 480
 Kalashnik, N.A. 197
 Kanhere, S.R. 1754, 1793
 Kannan, S. 306
 Kantack, B.H. 550, 540
 Kapur, O. 1760, 1473
 Kapusta, G. 324, 108, 1532, 110, 1487, 1534, 1358
 Karczmarczyk, S.J. 353, 1366
 Karlen, D.L. 404
 Kataria, O.P. 1389
 Kaveh, Hossein. 178, 626
 Kearney, T.E. 98, 14, 320
 Kelley, D.B. 78, 1730, 1613
 Kemble, R.J. 199
 Kerr, E.D. 1025
 Kerr, Eric D. & NebGuide. 1024
 Kerr, Eric. & NebGuide. 962
 Kerridge, Peter Campbell. 1494
 Keys, C.H. 1376
 Khalaf, K.T. 549
 Khanzada, A.L. 882, 668, 697
 Khaskheli, A.M. 882, 792, 668, 697
 Khodayari, K. 1414
 Kieckhefer, R.W. 550
 Killorn, R.J. 1636, 1732
 Kim, W.K. 226, 913
 Kimber, G. 270, 1020
 Kindler, S.D. 528
 King, T. 358
 Kinglands, G.C. 1071
 Kingsbury, R.W. 78, 1613, 1730
 Kingsland, G. 895, 733, 709
 Kingsland, G.C. 1074
 Kinnear, J. 369, 1501
 Kinnear, J.E. 1208
 Kirkham, M.B. 346
 Kirkland, K.J. 1376
 Kirkland, Kenneth. 77, 433, 1215
 Kisiel, M.J. 282
 Kissel, D.E. 147, 362, 119, 1550
 Klepper, B. 536, 1627, 1646
 Klepper, L. 400, 1515, 1348
 Klepper, L.A. 332, 1438
 Klocke, N.L. 1665, 1384
 Klopfenstein, T. 1696, 1781
 Klostermeyer, E.C. 529
 Knapp, J.S. 1611
 Knapp, W.R. 1611
 Knott, D.R. 181, 632, 1834, 1046, 1047
 Kobayashi, K. 987, 1251
 Koehler, F.E. 1593, 1594, 1486, 1648, 1511
 Kohut, R.J. 1809
 Kokko, E.G. 630
 Kollmorgen, J.F. 746, 681
 Kolmakova, I.R. 197
 Kolp, B.J. 103, 1528, 102, 1527, 1526
 Konzak, C.F. 166, 285, 1091
 Kotze, J.M. 799
 Kozina, G.Ya. 1209
 Kraft, J. 1580
 Kramer, C.L. 826, 1067, 800, 914
 Kramer, K.J. 1255, 1300

AUTHOR INDEX

- Kranz, J. 972
 Krausz, J.P. 885
 Krenzer, E.G. Jr. 30, 36
 Kress, L.W. 1809
 Kring, T.J. 520, 589, 557
 Krings, M. 182, 635
 Kronstad, W.E. 255, 1210
 Krouse, L.J. 654
 Kruger, J.E. 364
 Krupinsky, J.M. 664, 268, 1017, 622
 Krygier, B.B. 921
 Kucey, R.M.N. 309, 394
 Kuhn, L.W. 462
 Kuhn, R.C. 947, 237, 573
 Kull, F.J. 1224
 Kulshrestha, G. 1462, 1217
 Kumar, V. 1389, 355, 1500
 Kupidlowska, E. 1151
 Kuzina, F.D. 388
 Laanio, T. 1378
 Labhsetwar, V.J. 150, 1601
 Lacey, J. 801
 Lafever, H.N. 573
 Lahilum, Howard Kenneth,. 46
 LaHue, D.W. 449, 1264
 Lai, F.S. 1783, 1299, 1737
 Lamey, H.A. 696, 512, 1127
 Langenberg, W.G. 577, 1694, 1150
 Langenberg, W. G.& NebGuide. 1143
 Langenberg, W.G. 1134, 1153
 Langer, D.K. 1388
 Lapis, Delfin B.,. 791
 Larson, A. 1478
 Latin, R.X. 610, 134, 926
 Latterell, F.M. 648, 1712
 Lau, H.P. 1788, 1750
 Lau, P.Y. 1754, 1793
 Laurence, J.A. 818, 466
 Lavake, D.E. 75, 1368
 Law, C.N. 199
 Lawrence, J.F. 1766, 1422, 1331, 1745, 1430
 Le Tourneau, D. 212, 1773
 Leather, G.R. 1466, 1743
 Ledingham, R.J. 1104
 Lee, S. 1757
 Lee, S.C. 1751, 1789, 1750, 1788
 Lee, T.S. 931, 236, 946
 Lee, W.O. 1323
 Lee, Y.W. 415, 1443, 504, 1459
 Leech, R.M. 399
 Leep, R. H. 155
 Leesch, J.G. 1283
 Leikam, D.F. 119, 1550
 Lengel, M. 715
 Lengkeek, V.H. 654, 863, 1131, 862, 637, 1107, 638
 Lengkeek, Venance H. 1157
 Leonards, W.J. 1539
 Leslie, J. 500, 200
 Lessoing, G. 1696, 1781
 Lessoing, Gary W. 1235, 1695
 LeTourneau, D. 1774
 Letzsch, W.S. 401, 316, 1824
 Leukel, R. W. 1057
 Levi, E. 180, 631
 Liebl, R.A. 437, 1393, 1222, 424, 1203, 1369
 Lierop, W van. 313
 Limber, D.P. 600
 Lin, N.S. 1134
 Lindsay, R.C. 1767, 1258
 Lindwall, C.W. 1644, 1336
 Line, R.F. 96, 764, 201, 738, 741, 1082, 692, 743, 1832, 1052, 691, 745, 1083, 744, 739, 690, 867, 830, 689, 783, 716, 866, 695, 1001, 1090
 Line, R.R. 700
 Lipps, P.E. 1041, 876, 829, 445, 976, 939, 932, 1007
 Lisker, N. 929
 Lister, R.M. 1136
 Littlefield, L.J. 305, 1078
 Liu, M.T. 786
 Liu, S.L. 108, 324, 1532, 110, 1487, 1534
 Livers, R.W. 522, 564
 Llata, A. de la. 65
 Llosa Baluarte, Carlos,. 221, 417
 LOAGA. 1326
 Lockwood, J.L. 930
 Loegering, W.Q. 216, 900
 Long, D.L. 1005, 205, 771, 1003
 Long, D.L. comp. 828
 Lopez-Benitez, Alfonso. 230, 613
 Loria, R. 810
 Loschiavo, S.R. 1268, 1749, 1440, 1291, 1451, 1281, 1269
 Loubane, M. 989
 Louis, M.S. 1774
 Lowry, J.R. 228, 917
 Ludwick, A. 387, 1638
 Ludwick, A.E. 418, 1573, 76, 1589
 Luthra, J.K. 247, 973
 Lutshishina, E.G. 1209
 Luz, W.C. da. 878, 734, 1075
 Lyles, L. 174, 1506, 1682, 27, 1657, 1676
 MacArthur, L.A. 1247
 Macdonald, J.L. 772
 Machtmes, R. 806, 222, 905, 737, 923, 444, 203, 765
 MacKenzie, D.R. 770, 256, 980, 269, 1018, 778, 671, 1056
 MacLeod, J.A. 71
 MacMasters, Majel M. 1111
 Madhosinh, C. 636, 1425
 Madisen, L.J. 1271, 1437, 769, 1433, 1270
 Madrid, F.U. 1439, 1275, 1279
 Magan, N. 801
 Mahler, R.L. 351, 1815, 1498
 Makarim, A.K. 340, 1563, 1164
 Malakondaiah, N. 374, 1221
 Malek, R.B. 598
 Maloy, O.C. 1064
 Malzer, G.L. 357
 Mani, V.S. 1462, 1217
 Manning, R.O. 1707, 1801
 Mansour, K.H. 1779
 Marcellos, H. 420, 1200
 Marcipar, A. 1699
 Mares, D.J. 970, 965
 Marlatt, C. L. 559
 Marshall, H.G. 817, 816, 705, 710
 Martell, L.B. 1079
 Marten, G.C. 439, 1703, 438, 1702
 Martens, J.W. 284, 1089
 Martensen, A.N. 924
 Martin, A.D. 1424, 1465
 Martin, A.R. 1362
 Martin, Alex R. 1308
 Martin, C.R. 1783, 1299, 1737, 497
 Martin, J.M. 359, 1596, 1664
 Martin, T.J. 498, 1117, 202, 501, 522, 564, 1128, 499, 1120, 560, 1139
 Martin, W. 287, 585
 Martinez-Gonzalez, J.M.S. 219, 904
 Mathers, A.C. 397, 1711
 Mathewson, P.R. 50
 Mathre, D. 612, 915
 Mathre, D.E. 1036, 864, 729, 725, 724, 803, 683, 684, 680, 805, 918, 986, 1009, 768, 1482

AUTHOR INDEX

- Matocha, J.E. 142, 251, 1587
 Matthias, A.D. 9, 124, 1192
 Maxwell, T.M. 362, 147
 May, L. 1768
 Mayol, P.S. 603
 Mays, D.A. 385, 1635
 Mazuranich, P.C. 548
 Mburu, D.N. 108, 324, 1532
 McBride, T. 87, 1510
 McCarter-Zorner, N.J. 836
 McCool, D.K. 1446, 1713, 1813
 McCoy, N.L. 1043
 McCutchen, T. 1402, 172, 1637
 McCutchen, T.C. 856, 831, 865, 841, 811, 840
 McDole, R.E. 351, 1498, 1815, 1597
 McDonough, L.M. 1446, 1713, 1813
 McEwen, J. 1556
 McGaughey, W.H. 1302
 McGinnies, W.J. 1675, 1557
 McGinnis, J. 212, 1773
 McGregor, H.E. 1255, 1300
 McGuire, W.S. 129, 1804
 McHarry, M.J. 1358
 McIntyre, G.A. 611, 478
 McKercher, R.B. 1441, 1188
 McKibben, G.E. 84, 1419
 McKinion, J.M. 1714, 1728
 McKinney, H.E. 122, 595, 1497
 McLean, E.O. 1562
 McLeod, H.A. 1422, 1766, 1331, 1745, 1430
 McMullen, C.R. 1121
 McNeal, B.L. 825, 326, 790
 McNeil, W.K. 1330
 McNew, R.W. 565
 McShane, M.S. 645
 McVey, D.V. 261, 998, 219, 904, 956, 286, 1100, 966
 McVey, M.A. 407, 787
 Megalla, S.E. 1756
 Meier, F.C. 762
 Meier, G.P. 436
 Meints, V.W. 339, 359, 1664, 1596
 Mel'nicuk, Yu. P. 1209
 Menge, J.A. 940, 1489
 Mengel, D.B. 173
 Mensah, G.W.K. 1303, 1260, 1305
 Meredith, H. 312, 162, 383, 89, 311, 382
 Merkle, O.G. 563, 264, 234, 1135
 Mernaugh, R.L. 1144
 Messersmith, Calvin Glenn,. 1412
 Metz, S.G. 803, 683, 684
 Metzger, R.U. 681, 255, 1210, 231, 943
 Meyer, M.W. 411, 1741
 Meyer, R.E. 1472, 1226
 Meyers, J.D. 1821, 1230
 Miller, B.S. 1783, 1299, 1737, 50, 1250, 1807
 Miller, J.D. 1351, 179, 627, 235, 945
 Miller, R.W. 1507, 1808
 Miller, S.D. 1196, 1444, 1229, 1475, 1381, 1198, 1445, 1416, 381, 1395, 1329
 Miller, S.E. 33, 1240
 Mills, D. 1035
 Mills, J.G. 1718, 1554
 Mills, R.B. 1284
 Milus, E.A. 1090
 Mita, T. 1780
 Mitchell, B.L. 398, 657
 Moechnig, B.W. 1836, 1810
 Moench, J.M. 41
 Mohasci, S.G. 31, 1674, 1651
 Moldenhauer, W.C. 1679, 1678
 Mont, Ricardo M. 1058
 Moore, K.J. 928
 Moraghan, J.T. 1524
 Morgan-Jones, G. 1063
 Morill, W.L. 535
 Morrill, W.L. 588
 Morris, E.R. 1768
 Morrison, I.N. 1202, 1365, 1341
 Morrison, K.J. 166, 285, 1091, 96, 201, 764, 137
 Morrow, L.A. 1342, 13, 289, 1364, 1394
 Mortensen, K. 969
 Morton, J.B. 918, 986, 1009
 Mortvedt, J.J. 385, 1635
 Moseman, J.G. 228, 917, 270, 1020
 Moser, H.C. 119, 1550
 Moss, H.J. 1163
 Moyer, J.R. 323, 1337
 Mueller, R.T. 1208
 Mugwira, L.M. 344, 1195, 366, 1604, 307
 Muhlbauer, W. 1734, 1740, 1721
 Muir, L.A. 1710
 Murdock, E.C. 154, 272
 Murphy, C.F. 1087, 861, 211
 Murphy, L.S. 119, 1550, 1567
 Murray, T. 923
 Murray, T.D. 672, 301, 1023
 MXMRA. 92, 315, 1517, 152, 375, 157, 1619, 1505, 384, 163, 1629, 334, 117, 348, 130, 312, 162, 383
 MYCOA. 302, 1040
 Nagarajan, S. 972, 1002
 Naiki, T. 1011, 872
 Nalewaja, J.D. 1196, 1444, 1229, 1475, 1408, 1371, 1381, 1198, 1445, 1416, 475, 1410, 1329
 Naqvi, S.M. 345
 Nara, J.M. 1285, 1767, 1258
 Nass, H.A. 269, 1018
 NASSD. 957, 242
 Nazareno, N.R.X. 624
 Need, J.T. 565
 Nelson, B.D. Jr. 294, 767
 Nelson, D.W. 373, 616
 Nelson, L.R. 292, 1211, 906, 223, 944, 1006
 Nelson, R.R. 770, 256, 980, 667, 269, 1018, 778, 671
 Nelson, S.O. 1267
 Nelson, Stuart Owen,. 524, 1839, 1689
 Nesheim, S. 1785, 1746, 1761, 1800
 Nelson, R.R. 1056
 Neuman, P.R. 416, 218, 190
 Nguyen, H.T. 1130
 Nibler, F. 341, 1659
 Niblett, C.L. 260, 1138, 1119
 Nicholas, P.J. 1557, 1675
 Nicholls, Qrville L. 90
 Nichols, R.L. 1351
 Nichols, T.E. Jr. 55
 Nicholson, H.H. 1697
 Niethammer, K.R. 1427, 1717
 Niks, R.E. 300, 911, 663
 Nilsen, L. 310, 1513
 Nilson, E. 1407
 Nishita, H. 369, 1501
 Nissen, S.J. 136, 459
 Noggle, J.C. 1186, 1811
 Nolt, B.L. 897, 1132
 Nolte, P. 1095, 1096
 Noori-Fard, F. 115, 1545
 Nordgaard, J.T. 936, 964
 Norlyn, J.D. 78, 1730, 1613
 Norman, J.M. 571, 1831
 Norvell, W.A. 961
 Nowak, E. 1151
 Nykaza, S.M. 1129

AUTHOR INDEX

- Nyquist, K. 12, 1231
 O'Bannon, J.H. 604
 O'Donovan, J.T. 1421, 1176
 O'Leary, M. 92, 315, 1517, 365, 1603, 318, 1159, 1520, 390, 176, 91, 314, 1516
 O'Sullivan, P.A. 1421, 1176
 OASPA. 156, 1666, 1617, 327, 111, 1185, 1374, 389, 1672
 Obst, A. 446
 OCFEA. 32, 1237
 Oehrtman, R.L. 32, 1237
 Ohki, K. 1778, 1167, 1205, 139, 1805, 1206
 Ohm, H.W. 513, 1116, 1141, 947, 237
 Olien, C.R. 431, 1214
 Oliver, L.R. 1307
 Olsen, J.S. 114, 1655, 1544
 Olsen, S.R. 1536
 Olson, B.M. 1188, 1441
 Olson, R.V. 1567
 Olsson, L. 933
 Onsager, J.A. 483, 548
 Oplinger, E.S. 161, 275, 1051
 Orr, J.P. 1385
 Orr, W. 636, 1425
 Osborn, G. 385, 1635
 Otta, J.D. 637, 1107, 638
 Overdahl, C.J. 91, 314, 1516
 Overton, J.R. 1402
 Owens, H.I. 1375
 Owino, M.G. 1341
 Pacholak, E. 1381
 Pacumbaba, Rodulfo P., 1149
 Page, A.L. 1726, 1197, 1574, 455, 1549
 Palm, E.W. 851, 845, 857, 846, 853, 847, 852
 Palmer, M.L.A. 1097
 Pandey, D.P. 306
 Panopio, L.G. 1766, 1422, 1331, 1745, 1430
 Pantoja-Lopez, A. 516
 Pantoja, A. 503
 Papastylianou, I. 403, 1160
 Papavizas, George C. 873
 Papendick, R.I. 1813, 1446, 1713, 443, 1639, 1514
 Parker, R. 169, 1403
 Parmeter, J.R. Jr. 896
 Parsons, Sammuel D. 100, 1652
 Pathan, I.H. 882, 792, 668, 697
 Patterson, F.L. 263, 562, 1070, 244, 547, 468, 273, 440, 1141, 546, 243, 233, 543
 Paulsen, G.M. 127, 1194, 10, 1227
 PCBPB. 819, 1424
 Peabody, D.V. 170, 1404, 1409
 Pecknold, P.C. 610
 Pedersen, J.R. 1744
 Pedersen, W.L. 713, 711, 706, 269, 1018
 Pederson, V.D. 728, 704, 703, 727
 Pederson, W.L. 1105
 Peeper, T. 1313, 39, 1413
 Peeper, T.F. 30, 1314, 1343, 36, 1330
 Peng, W.K. 570
 Percich, J.A. 1154
 Perring, T.M. 571, 1831, 586
 Pestka, J.J. 786, 1750, 1788, 1747, 1786
 Peters, J. 1774
 Peters, L.J. 212, 1773
 Peters, L.L. 493, 1426
 Peterson, C.J. 96, 764, 201, 137
 Peterson, G.A. 321, 101, 1161, 337, 1558, 141, 1584
 Peterson, G.L. 249, 552
 Peterson, V. 529
 Pfeifer, R.P. 1130
 PGPCA. 1665, 1384, 1669, 1397, 1720
 Phillips, W. J. 579, 1692
 Phipps, P.M. 839
 PHYTA. 658, 180, 631, 672, 910, 222, 905, 1038, 1059, 1067, 825, 188, 644, 807, 1046, 1834, 1002, 930, 810, 300, 911, 663, 1068, 1833, 301, 1023, 219, 904, 629, 829, 1832, 1052, 258, 990, 1114, 1245
 PHYTAJ. 931, 786, 770, 1079, 981, 248, 974, 1011, 872
 PIACA. 610
 Pierce, R. 1055
 Pike, K. 536
 Pike, K.S. 534, 529, 537, 496
 Pike, R.K. 1363, 1447
 Pimentel, D. 1722, 1559
 Pinter, P.J. Jr. 7, 1178
 Pitts, J.T. 1354
 PIWCA. 1816, 1736
 PLDRA. 271, 1026
 PLPHA. 423
 PNWSB. 1355
 Polizotto, K. R. 173
 Pomeranz, Y. 1784, 1725, 1738, 17
 Pomeroy, M.K. 303, 473, 461, 472
 Porter, K.B. 552, 249
 POSCA. 1794, 1706, 1701
 Powell, R.C. 895
 Powelson, R.L. 662, 661, 742, 843, 889, 888, 887, 681, 886, 660, 633, 659, 634, 1512, 919
 Power, J.F. 1547
 PPGGD. 1190
 Praag, H.J. van. 1565, 1566
 Prasad, R. 1548
 Prendeville, G.N. 1340
 Preston, K.R. 364
 Pretorius, Z.A. 771, 205
 Pring, R.J. 819
 Priyadarshini, E. 52, 784
 Proudfoot, F.G. 1787
 Pruess, K.P. 528
 Pryor, A. 376, 1170
 Puckridge, D.W. 403, 1160
 Pumphrey, F.V. 1640, 156, 1617, 1666, 104, 1162
 Puranik, Shivayogi Basaya,. 640
 Pure, G.A. 395, 649
 Qi, Y.T. 1298
 Qualset, C.O. 262, 615, 1776, 1280, 245
 Quarrie, S.A. 225, 526
 Quatrano, R.S. 442
 Quick, J.S. 150, 1601, 143, 1588
 Quinlan, J.K. 1299, 1783, 1737, 1296, 1273
 Rabb, J.L. 777
 Rahman, Fazal. 1145
 Rains, D.W. 245
 Rajaram, S. 957, 242, 447, 196
 Rajendra, B.R. 299, 220
 Rakotondradona, R. 738, 783
 Ramakrishna, R. 1473, 1760
 Randall, G.W. 375, 152
 Randall, P.J. 1163
 Rangaswamy, J.R. 1797, 1758
 Ransom, J.K. 1154
 Rao, M.V. 247, 973
 Rao, Srinivas C. 210, 1560
 Rapilly, F. 1103
 Rardon, P. 1386, 94, 1325
 Rasmussen, J.A. 1306
 Rasmussen, P. 536
 Rasmussen, P.E. 1640, 156, 1617, 1666, 389, 1672, 1523, 408, 1542
 Rathjen, A.J. 606
 Rathke, Eileen Jane Settle,. 419, 532
 Ravenscroft, A. 1152

AUTHOR INDEX

- Ravenscroft, A.V. 271, 1026, 978, 146, 675, 827
 Ravishanker, P. 1817, 1723
 Rawlings, J.O. 1809
 Raymond, P.J. 798
 Read, D.W.L. 372, 1609, 171, 1681, 1602
 Reasons, D.L. 820
 Redlinger, L.M. 1283, 56, 1450, 1282
 Reed, A.J. 426
 Reed, H.E. 856, 908, 831, 865, 841, 693, 811, 840, 854, 879
 Rees, R.G. 982
 Reginato, R.J. 7, 1178
 Reid, J.T. 1661, 1577
 Reis, E.M. 825, 326, 790
 Reisinger, G. 1721, 1734, 1740
 Reitz, L.L. 160, 1624
 Renaudin, H. 1147
 Renger, M. 343, 1570
 Retan, A.H. 529
 Retzinger, E.J. Jr. 1326
 Reule, C.A. 160, 1624
 Reyes, Juanito Calampiano, . 979, 363, 1382
 Reynolds, J.H. 1808, 1507
 Ricard, B. 1147
 Richard, P.A. 1326
 Richards, R. 78, 1613, 1730
 Richardson, D.P. 57
 Richardson, P.E. 277, 576
 Rickerl, D.H. 1630
 Rickes, E.L. 1710
 Rickman, R.W. 536, 408, 1542, 1646, 1627
 Riga, A. 1565, 1566
 Riveland, N. 1315, 1649
 Rivera, C.M. 1355
 Roager, N.C. Jr. 1523
 Roane, C.W. 265, 464, 815, 1108
 Robbins, Paul R. 100, 1652
 Roberts, J.J. 553, 263, 562, 194, 495, 1070, 511, 518
 Roberts, P.A. 593, 122, 595, 1497
 Roberts, R.K. 29, 1827, 22, 1826
 Roberts, S. 1593, 1594
 Robinson, E.L. 1346, 1347
 Robinson, F.E. 356, 463, 1585
 Rockwood, L. P. 583
 Rodgers, R.D. 1720
 Rodrigues, J.J.V. 413, 1352
 Roelfs, A.P. 1079, 981, 248, 974, 1005, 284, 1089, 956, 238, 948, 624, 1003, 669, 909, 1004, 966
 Rogers, R.F. 59
 Rohde, C.R. 1523
 Rohringer, R. 824, 226, 913, 822
 Roltsch, W.J. 566
 Romaine, C.P. 897, 1132
 Romanowski, R.R. 469, 1471
 Romney, E.M. 369, 1501, 1208
 Rook, H.L. 1248
 Rossi, A.E. 648, 1712
 Roth, D.A. 647
 Rothberg, J.M. 772
 Rotunno, T. 58
 Rouse, D.I. 770, 778, 671, 1056
 Rowe, Randall Charles. 135, 954
 Rowell, J.B. 891, 761, 1010, 266, 1012, 736, 992
 Roy, D.N. 1762, 1072
 Royer, M.H. 980, 256, 667
 Royle, D.J. 961
 Rubenthaler, G.L. 166, 285, 1091, 96, 764, 201
 Rufty, R.C. 1087, 861, 211
 Runyan, T.J. 1330
 Rush, D.W. 78, 1613, 1730
 Rush, I. 1781, 1696
 Rutgers, T. 1148
 Rychlik, W. 1151
 Rydrych, D.J. 1360, 1374, 1361, 1327, 1312, 1396, 1642
 Rynd, L. 295, 1238
 Saari, E.E. 972
 Sabbe, W.E. 164, 1632, 1591
 Sabir, B.A. 107, 1339, 1654
 Sacks, J.M. 1015, 950, 240
 Safaya, N.M. 374, 1221
 Salazar, G.M. 283, 1084
 Salerno-Rife, T. 1148
 Samborski, D.J. 823, 177, 623
 Sammons, D.J. 228, 917
 Samson, F.B. 480, 125
 Samson, R. 1126
 Samson, R.G. 1153
 Sander, D.H. 101, 321, 1161, 337, 1558, 141, 1584
 Sandermann, H. Jr. 1454, 1207
 Sands, D.C. 1036
 Sandvol, L.E. 1739, 1301, 1252
 Sanford, J.O. 99, 1525, 116, 1546, 335, 118, 1656
 Sanmaneechai, M. 1593, 1594
 Santo, G.S. 604
 Sapp, C.D. 1820
 Sauer, D.B. 1297, 880, 1244, 1289, 1288, 1245
 Saunders, R.M. 1256
 Sawhney, R.N. 250, 977
 Saxena, Prakash Narain. 485
 Sayers, P.E. 1465
 SCAEA. 33, 1240
 SCCA. 272, 154
 Schaadt, N.W. 1109
 Schafer, David Eugene. 1469
 Schafer, J.F. 205, 771
 Schafer, W. 1207, 1454
 Schaff, B.E. 378, 1618
 Schaller, C.W. 231, 943
 Scharen, A.L. 629, 246, 968
 Scheel, D. 1207, 1454
 Schein, R.D. 667
 Schieferstein, R.H. 1662, 1370
 Schmidt, B.A. 1292
 Schneider, R.P. 153, 1612, 1595, 1727, 1586
 Schrader, C.A. 157, 1505, 1619
 Schrader, C.R. 158, 379, 1620
 Schreeg, T.M. 1808, 1507
 Schreiber, M.M. 515, 336, 1350
 Schultz, L.J. 1236, 1261
 Schultz, M.E. 1332
 Schumann, F.W. 1355
 Schwalbe, M. 1704, 1442
 Sciumbato, G.L. 835, 855, 123, 832, 754, 655
 Scott, D.B. 763
 Scott, D.H. 610, 758, 676
 Scott, Donald Howard,. 782, 1124
 Scott, K.J. 395, 649
 Scott, P.M. 1793, 1754
 Scott, R.B. 741, 1082, 743, 700, 1083, 744, 739
 SDFHA. 12, 1231
 Seamands, Wesley J. 1492
 Sears, E.R. 900, 216
 Seavers, Paul M. 1013
 Seibold, G. 972
 Seifers, D.L. 498, 1117
 Sekhon, G.S. 317, 1519
 Semper, R.C. 1265, 1733
 Senft, D. 1199
 Senft, D.H. 1318
 Sethi, B.C. 93, 1518, 1496

AUTHOR INDEX

- Severson, D. 1458
 Severson, R.K. 384, 163, 1629, 334, 117, 348, 130, 371, 1608, 370, 1607, 347, 1575
 Shafer, M. 837
 Shahwan, I.M. 1133
 Shakes, F.M. 877
 Shaner, G. 931, 751, 1102, 752, 679, 910, 937, 760, 678, 750, 759, 677, 749, 758, 676, 755, 699, 1019, 975, 996, 237, 947
 Shaner, G.E. 373, 616
 Shannon, G.M. 1792, 1753
 Shariff, G. 1772, 1280, 1776
 Sharma, S.K. 701
 Sharma, Y.R. 701
 Sharman, E.D. 88
 Sharp, E.L. 268, 1017, 622
 Sharpe, R.R. 105, 1530, 1653, 1631
 Sharpley, A.N. 1491, 1615
 Shayewich, C.F. 1367
 Shea, P.J. 1391, 1372
 Shearer, B.L. 1050
 Shedd, D.T. 33, 1240
 Sheley, R.L. 1418
 Sheridan, J.E. 757
 Shilling, D.G. 437, 1222, 1393
 Shimabukuro, R.H. 428, 1453
 Shkvarnikov, P.K. 195
 Shogren, M. 1783, 1299, 1737
 Shogren, M.D. 1302
 Shotwell, O.L. 1756, 1753, 1792, 1752, 1791
 Shrift, A. 1224
 Shukla, U.C. 355, 1500
 Shumway, C.R. 35
 Shurtleff, M.C. 471, 575, 1647
 Siddoway, F.H. 393, 402, 1181
 Siemens, J.C. 575, 471, 1647
 Sim, T. IV. 999
 Simon, A. 605
 Simonson, J. 1478
 Simpson, A.M. 1610
 Simpson, J.B. 1658, 1568, 1715, 1668, 1626
 Sinclair, J.B. 1034
 Singh, A. 68, 1533
 Singh, D.V. 960
 Singh, J. 425, 1204
 Singh, K. 1641
 Singh, S.L. 860, 804, 774, 773
 Single, W.V. 420, 1200
 Singleton, L.L. 814
 Sinha, R.N. 1277, 1439, 1275, 1276, 1279, 1272, 1259
 Sitton, J.W. 745, 983, 869
 Skaria, M. 1136
 Skogley, E.O. 378, 1618, 359, 1664, 1596
 Slesinski, Ronald Stephen. 902
 Smika, D.E. 1316, 1650, 88
 Smika, Darryl E. 441, 1504
 Smiley, R.W. 1098
 Smith, C.M. 503, 516, 517, 1771
 Smith, D.H. Jr. 492
 Smith, E.L. 563, 264, 234, 1135
 Smith, E.M. 799
 Smith, F.H. 895, 272, 154
 Smith, G.E. 1710
 Smith, G.R. 292, 1211
 Smith, Glenn S. 949, 239
 Smith, L.B. 1281
 Smith, L.J. 1076
 Smith, M.N. 431, 1214
 Smith, S.B. 140, 1583
 Smith, S.H. 897, 1132
 Smyth, D.A. 422, 1166
 Snyder, W.D. 1719, 1645
 Sobolik, F. 153, 1612
 SOGEBZ. 197
 Soliman, K.M. 245
 Soltanpour, P.N. 150, 1601, 1536
 Somsen, H. W. 486, 1709
 Sosa, O. Jr. 573, 539
 SOSCA. 109, 1729
 Sotelo, Angela. 1765
 Souther, J.W. 948, 238
 Speirs, W.E. 1292
 Spies, C. D. & Agronomy guide. 1168
 Spomer, S.M. 528
 Springer, J.P. 648, 1712
 Srivastava, K.D. 960
 Srivastava, O.P. 93, 1518, 1496
 SSSJD. 119, 1550, 1486, 1648, 1511, 378, 1618
 SSSJD4. 1594
 Stahl, T. 1721, 1734, 1740
 Stahlman, P.W. 13, 289, 1364, 1333
 Standish, J.F. 1799
 Stanley, P.I. 1424, 1465
 Starks, K.J. 538
 Starling, T.M. 464, 265
 Starratt, A.N. 1294
 Staten, R.T. 483
 Statler, G.D. 787, 407, 952, 951, 936, 964, 942, 1095, 1096
 Stebbins, N.B. 244, 547, 243, 546
 Steck, W.F. 569
 Steinsiek, J.W. 1307
 Steller, W.A. 1434, 1328
 Stern, V.M. 544
 Stevens, D. 83
 Stewart, B.A. 397, 1711
 Stickley, A.R. Jr. 470
 Stiegler, J. 39
 Stobbe, E.H. 1341, 1345, 1367
 Stockdale, Harold. 1456
 Stoewsand, G.S. 1634, 1802, 1708
 Stolzenberg, R.L. 1180, 1431
 Stolzy, L.H. 435, 1220, 165, 1822, 1731
 Stomberg, E.L. 1156
 Stone, M.L. 1261, 1236
 Storey, C.L. 1297, 880, 1244, 1289, 1288, 1245, 1783, 1299, 1737, 497
 Straughan, I.R. 165, 1822, 1731
 Strebler, O. 343, 1570
 Street, M.W. 1265, 1733
 Stromberg, E.L. 838
 Struble, D.L. 569
 Stubblefield, R.D. 1792, 1753, 62
 Stuckey, R.E. 698, 859, 836, 837, 834
 Sturko, A.R.W. 1345
 Stuthman, D.D. 219, 904
 Su, H.C.F. 1278
 Subbarao, K.R. 1760, 1473
 Sudarski-Hack, V. 53, 453, 1540
 Sukkestad, D.R. 497
 Sullivan, D.M. 145, 1592
 Sumner, D.R. 1109
 Sumner, L.C. 565
 Sumner, M.E. 401, 316, 1824, 354, 1579
 Sunderman, D.W. 1076
 Sunderwirth, S.D. 909
 Suneson, C. A. 525, 213, 1690
 Sung, J.M. 802
 Sutton, P.J. 321, 101, 1161
 Swallow, W.H. 607, 1476, 1069
 Swan, D.G. 1406, 1377
 Swearingin, Marvin L. 100, 1652
 Swenson, A.L. 37
 Swims, J.C. 772
 Swingle, R.S. 65

AUTHOR INDEX

- Swingle, W. T. 995, 1073
 SWSPB. 1351
 Syltie, P.W. 429, 253, 1600
 Tabassum, M.S. 107, 1339, 1654
 Takamatsu, S. 766
 Talaat, Elham Hussein., 191
 Tarrant, K.A. 1465
 Tatarko, J. 174, 1682, 1506, 27, 1676, 1657
 Tavil, M.V. 195
 Taylor, C.R. 42, 1829
 Taylor, R.G. 874, 342, 657, 398
 Teissere, M. 1146
 Telford, J.N. 1708, 1802, 1634
 Temple, P.J. 1809
 Teng, P.S. 248, 974
 Thean, J.E. 648, 1712
 Theander, O. 1764
 Thill, D.C. 1418
 Thilsted, W.E. 885
 Thom, W.O. 144, 1590
 Thomas, G. 731, 842, 712
 Thomas, G.G. 667
 Thomas, V.M. 54
 Thompson, B.K. 1700, 1790, 1705, 1794, 1706, 1701, 1799
 Thompson, J.P. 982
 Thompson, N.S. 1684
 Thompson, S.S. 988
 Thorpe, C.W. 1785, 1746
 Thurlow, D.L. 1521
 Tice, T.F. 30, 36
 Tilton, E.W. 1286, 1263
 Timian, R.G. 512, 1127, 1156, 542, 232
 Tinline, R.D. 1104
 Tipples, K.H. 1770, 1735, 1782
 TISAA. 1724
 Tkachuk, R. 388
 Toba, H.H. 521
 Tomerlin, J.R. 826, 270, 1020, 1067
 Toole, J.L. 571, 1831
 Torres, E. 242, 957
 Touchton, J.T. 352, 1777, 1630, 95, 319, 1522, 105, 1653, 1530, 151, 367, 1631, 1661, 1577, 368, 1606, 812, 1553
 Tran, T.S. 313
 Trauba, R.L. 1266, 1748
 Trenholm, H.L. 1790, 1700, 1705, 1794, 1701, 1706, 1799
 Trevathan, L. 820
 Trione, E.J. 921, 45, 780
 Triplett, B.A. 442
 Triplett, G.B. Jr. 1319
 Trucksess, M.W. 1746, 1785, 1761, 1800
 Tsai, C.Y. 373, 616
 Tuefel, D. 1625
 Tulpule, P.G. 1072, 1762, 52, 784
 Tunio, Mohammed-Ilyas L.,. 67, 325
 Tupy, D.R. 1391
 Turner, J.E. 521
 Turpin, F.T. 515
 Tutt, C. 698
 Tyczkowska, K. 1759, 1798
 Tyler, J.M. 11, 276, 574
 Ui, T. 987, 1251
 Ungsunantwiwat, A. 1284
 Utschig, J.M. 87, 1510
 Uyemoto, J.K. 1155
 Van Gundy, S.D. 593, 122, 595, 1497
 Van Wert, S.L. 271, 1026
 Vander Vost, P.B. 167, 1670, 1400
 Vardell, H.H. 1286, 1263
 Varriano-Marston, E. 1172
 Varsa, E.C. 324, 108, 1532, 110, 1487, 1534
 Varvel, G.E. 92, 315, 1517, 163, 384, 1629, 117, 334, 130, 348, 312, 162, 383, 106, 322, 1531, 371, 1608, 370, 1607, 347, 1575, 89, 311, 382
 Vaux, H.J. Jr. 165, 1822, 1731
 Venugopal, J.S. 1249, 1295
 Vian, W.E. 834
 Viator, H.P. 503, 516, 148, 984, 257, 517, 1771
 Vicini, F.A. 1814, 1755
 Vidaver, A.K. 1106
 Vijayaraghavan, M. 1762, 1072
 Vise, O. 249, 552
 Visser, C.P.N. 763
 Vogel, O.A. 6, 254
 Vogt, H.E. 615, 262
 Vohra, P. 1280, 1776
 Vohra, P. Qualset, C.O. 1772
 Wagagger, M.G. 362, 147
 Waggoner, P.E. 961
 Wahl, I. 1042
 Waines, J.G. 190, 252, 1169
 Wal, A. F. van der. 781
 Waldher, J.T. 690, 867, 830, 689, 716, 866, 695
 Waldher, J.T. 692, 723, 688, 691, 722, 719, 745, 718, 721, 717, 656
 Waldhur, J.T. 720
 Walker, D. 1297, 1289
 Walker, D.E. 880, 1244
 Walker, D.J. 1680, 1171
 Wallace, A. 1165, 369, 1501, 1208
 Wallace, G.A. 1165
 Wallace, S.U. 392, 1174, 1189
 Walsgott, D.N. 746
 Ward, J. 1781, 1696
 Ward, K. 1580
 Warder, F.G. 171, 1681
 Ware, G.O. 1109
 Warren, G.F. 336, 1350
 Warren, H.L. 616, 373
 Watkins, J. E. 1143
 Watkins, J.E. 651, 1099, 1016, 858, 884, 650, 1113, 1092, 646, 1025
 Watkins, John E. 1053, 1024, 962
 Watkins, John Edward. 608
 Watson, G.R. 935, 708, 732, 1031, 731, 707, 842, 712
 Watson, S.J. 296, 508
 Watt, A.D. 509, 1687
 Watters, F.L. 1451, 1291, 1303, 1260, 1305
 Weakley, C.V. 1321
 Weaver, R.D. 20, 1823
 Webster, G.R.B. 1423, 1257, 1749, 1440, 1451, 1291
 Webster, J.A. 492
 Webster, J.P.G. 959
 WEESA. 1390, 1468, 1343, 1349, 1359
 WEESA6. 1429, 1179, 1391, 1333, 1372, 1387
 Wehling, R.L. 1744
 Wehner, F.C. 799
 Weihing, John. 962
 Weinstein, L.H. 818
 Weinzierl, R. 582
 Welch, L.F. 73, 1571
 Weller, D.M. 658, 1059
 Wells, B.R. 1610
 Wells, D.G. 953, 241
 Wells, H.D. 1351
 Wells, K.L. 144, 1590
 Wellso, S.G. 558, 991, 541, 491
 Wennekes, L.M.U. 1537, 1769
 Westbrook, F.E. 1375
 Westcott, N.D. 415, 1443, 504, 1459
 Westfall, D. 387, 1638

AUTHOR INDEX

- Westfall, D.G. 150, 1601, 143, 1588, 107, 1339, 1654, 418, 1573
 Westfall, R.H. 87, 1510
 Westlake, G.E. 1424, 1465
 Wetzel, D.L. 1744
 White, G.D. 1273
 White, N.D.G. 1439, 1275, 1259, 1274
 Whitesides, R.E. 1361
 Whitney, D.A. 147, 362, 119, 1550, 404
 Wicks, G.A. 1362, 1372, 1669, 1397, 168, 1671, 1401, 128, 1357, 1324
 Wicks, Gail A. 1308
 Wicks, Gg.A. 167, 1670, 1400
 Wiebe, W.L. 651, 858
 Wiese, A.F. 75, 1368
 Wiese, M.V. 922, 133, 1828, 930, 810, 134, 926, 675, 827
 Wiese, Maurice Victor.. 448
 Wilcox, Robert A. 1111
 Wilcoxon, R.D. 771, 205, 960, 219, 904, 1097, 267, 1014, 618, 238, 948, 333, 808, 1050, 1042
 Wilde, G. 578
 Wilhelm, K. 400, 1515
 Wilkins, D. 536
 Wilkins, D.E. 408, 1542
 Wilkins, H. 81, 474
 Wilkins, H.D. 10, 1227
 Wilkinson, R.E. 1213, 338, 456
 Willard, John Irving. 556, 430
 Williams, E. Jr. 848, 730, 994, 850, 849, 642, 1039
 Williams, E.D. 1063
 Williams, J.R. 1615, 1491
 Williams, M. 1837, 1463
 Williams, N.D. 627, 179, 235, 945, 189, 542, 232
 Williams, P. 1290
 Williams, R.J. 414, 1193, 434, 1216
 Williams, W.A. 1772
 Willis, L.D. Jr. 777
 Willis, W. 450, 1239
 Willis, W.G. 1033
 Willis, William G. 619, 1479
 Wilson, E. 1622, 1667
 Wilson, F.E. Jr. 1539
 Wilson, H.P. 1311
 Wilson, J.L. 1296
 Wilson, R.G. Jr. 1184, 1338
 Wishnok, J.S. 57
 WLSPA. 125, 480
 Wolf, D.D. 815, 1108
 Wolnik, K.A. 411, 1741
 Wood, G.E. 1785, 1746
 Woodbury, W. 1367
 Worsham, A.D. 424, 1203, 1369, 413, 1352
 Worsham, D. 437, 1393, 1222
 Wrage, Leon J. 1320
 Wright, F.E. 1021, 833, 809
 Wright, J. 358
 Wrigley, C.W. 1163
 Wu, A.H.B. 58
 WUEXA. 1406, 170, 1404
 Wyatt, R.D. 1801, 1707
 Wysong, D.S. 1099, 858
 Yadav, J.S.P. 109, 1729
 Yaduraju, N.T. 1217, 1462
 Yahnke, M.D. 735
 Yamazaki, W.T. 352, 1777
 Yang, Sheau-loh.. 1022
 Yarris, L. 971
 Yarris, L.C. 641
 Yates, W.E. 451, 1334
 Yechilevich-Auster, M. 180, 631
 Yetter, M.A. 1256
 Yin, C.M. 570
 Yocom, K.L. 1144
 Yocom, J.O. 1105
 Youmans, J. 1038
 Young, D.L. 1680, 1171
 Young, F.L. 1342, 1394
 Young, J.C. 1803, 1085
 Youngberg, H.W. 129, 1804
 Zagorski, W. 1151
 Zagory, D. 896
 Zaragoza, L.J. 1809
 Zaske, S.K. 1142
 Zbiec, I.I. 353, 1366
 Zehner, J.M. 1283
 Zentner, R.P. 1644, 1336
 Zettler, J.L. 1283, 56, 1450, 1282
 Ziv, O. 814, 240, 950
 Zwarich, M.A. 1718, 1554
 1893. 963
 1919. 997
 1922. 873
 1924. 1118
 1926. 191
 1927. 524, 1839, 1689
 1928. 329, 1483
 1929. 221, 417, 640
 1931. 903, 791, 1013
 1933. 441, 1504, 67, 325
 1934. 626, 178, 782, 1124
 1935. 1494, 363, 979, 1382, 1088, 1149
 1936. 572, 1691, 46
 1938. 788
 1939. 934, 941, 1449, 410, 1555
 1940. 532, 419, 210, 1560, 328, 448
 1941. 477, 1688, 1698, 479
 1942. 1412, 1140
 1943. 406, 297, 1436, 1022, 985, 409, 1488
 1944. 567, 1110

